

The background features a series of vertical color bands in shades of grey, yellow, teal, green, purple, and red. Below these bands is a grid of colored squares in blue, purple, teal, and grey, set against a black background.

MEDIA SCAPE

MEDIA

SCAPE

G U G G E N H E I M M U S E U M

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ARTVIEW

Guggenheim Museum SoHo
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Deutsche Telekom 

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SPONSOR'S STATEMENT

Art is communication; it creates understanding across frontiers. In many respects, Deutsche Telekom has already turned this truth into reality. For Deutsche Telekom, art's beauty is much more than what lies in the eye of the beholder. Art is intended to stimulate the mind and to encourage the observer to examine new viewpoints and ideas. Art has always been a seismograph registering social change. Indeed, throughout history, artists have depicted processes of change and their consequences for humankind.

At Deutsche Telekom, we focus on innovative concepts that unite research, technology, and new media. For this reason, we attach great importance to our collaboration with the Guggenheim Museum. The Guggenheim has a long history of bringing art to audiences in the United States, Europe, Asia, and Australia. Deutsche Telekom is establishing itself as a global telecommunications player, with a growing number of offices, partnerships, and activities throughout the world. The symbiotic relationship between art and telecommunications enables the Guggenheim Museum and Deutsche Telekom to share a global vision of people communicating without borders.

Our sponsorship of the Guggenheim Museum concentrates on multimedia art, the most innovative art form of our time. *Mediascape*, the first exhibition in our collaboration, displays its broad scope. *Mediascape* brings together, for the first time, works by renowned multimedia artists such as Marie-Jo Lafontaine, Bruce Nauman, Nam June Paik, and Bill Viola.

The exhibition takes place, in part, in the newly designated Deutsche Telekom Galleries in the Guggenheim Museum SoHo. These galleries, which are dedicated primarily to the presentation of works of multimedia and interactive art from the collections of the Guggenheim Museum and ZKM/Center for Art and Media Karlsruhe, reflect the changing structure of society.

Deutsche Telekom is committed to assuming a pioneering role in creating understanding and trust in the opportunities offered by future-directed technologies. Telecommunications will be among the key technologies of the next century. Not only will telecommunications have a lasting impact on the transfer of information, they will change the very way we work and how we enjoy our leisure time. In short, telecommunications will transform our way of living and will restructure society itself.

Deutsche Telekom is already playing a leading role in industrial society's metamorphosis into an information-based communications society. We are acutely aware of the enormous responsibility that accompanies this role. Our partnership with the Guggenheim Museum is an example of our commitment to fulfilling this responsibility.

On behalf of Deutsche Telekom, I hope that you enjoy this publication and the exhibition that it accompanies. I also wish you a pleasant journey into the information age.

Dr. Ron Sommer
Chairman of the Management Board
Deutsche Telekom

FOREWORD

Mediascape, the exhibition that marks the reopening of the Guggenheim Museum SoHo, offers cause for celebration on many fronts. It announces the Guggenheim's commitment to exploring the relationship between technology and culture; it initiates a long-term collaboration between the Guggenheim Museum and ZKM/Center for Art and Media in Karlsruhe, Germany; and, finally, the exhibition establishes collaborations with corporate partners who are providing both financial assistance and significant, long-term access to technology and expertise, which will enable the museum to realize complex and unusually demanding exhibitions of multimedia art.

This is an interesting moment in history, one that resembles the Italian Renaissance in its commingling of science, art, and the humanities. In contemporary society, the traditional notions of time and space have been transformed by advances in technology, telecommunications, and information transfer. Virtual communities have emerged, collapsing long-standing geographical boundaries and localized codes of cultural identity. The mass manufacturing and distribution of video and computer equipment has generated entirely new forms of cultural production. In unprecedented numbers, and with a sophistication born of easy access to complex technologies, artists are using these devices as aesthetic tools to develop a new syntax and structure for art making. *Mediascape*, which is drawn largely from the collections of ZKM and the Guggenheim, offers what its title suggests: a view of what new media have to offer, from sculptural formats and immersive environments to more recent interactive digital projects.

The seeds for a collaboration with ZKM were planted more than a decade ago, while Heinrich Klotz, now the Executive Director and Chairman of ZKM, was a visiting professor at Williams College in Williamstown, Massachusetts, and we taught a course together. Over the years, our professional relationship evolved into a close friendship, and we spent many hours discussing the potential impact of technology on the culture of the late-twentieth and early twenty-first centuries. When the opportunities afforded by the Guggenheim's presence in SoHo intersected with the museum's new partnership with Deutsche Telekom, the collaboration with ZKM became a reality. *Mediascape* is the first of a long series of exhibitions planned to investigate the enormous potential of the alliance between high technology and high culture.

This exhibition and its accompanying publication have been a team effort from beginning to end. I am most grateful to Professor Klotz and his staff at ZKM, including Curator of Contemporary Art Ursula Fröhne; General Manager Gerd Schwandner; Registrar Marianne Meister; Curatorial Assistant Oliver Seifert; Research Assistant Annika Blunck; and Technical Assistants Hartmut Bruckner and Adolf Mathias, as their participation in this project has been central to its success. From the Guggenheim, Associate Curator Nancy Spector and Assistant Curator for Research Matthew Drutt have done an exemplary job in giving shape to a complex project. They were ably assisted by Exhibition Coordinator Jon Ippolito, who handled myriad details of this undertaking. Curatorial interns Miren Jaio, Amy Kao, and Ursula Tax provided essential research assistance along the way. I also thank Lisa Dennison, Curator of Collections and Exhibitions, for her thoughtful counsel and assistance in managing various aspects of the project. Paul Kuranko and Mark McLoughlin, Multimedia Technical-Design Coordinators, have provided invaluable technical supervision, acting as the museum's liaison to many of the artists in the exhibition. The various details of installing this project were masterminded by Dennis Vermeulen, Senior Exhibition Technician; Michael Lavin, Head of Technical Services; Peter Costa, Project Services Manager/Exhibition Design Coordinator; Peter Read, Production Services Manager/Exhibition Design Coordinator; Jocelyn Groom, Exhibition Technician/Administrative Assistant; Christopher Skura, Museum Technician; Adrienne Shulman, Lighting Technician; and Ali Höcek of Höcek Sweeny Walter. Head Registrar for Collections and Exhibitions Suzanne Quigley arranged for the safe passage of works to the museum from their

various points of origin, and Director of Education Marilyn JS Goodman has developed a number of public programs that make the exhibition more accessible to the diverse audiences that visit the Guggenheim.

This catalogue was handsomely produced under the guidance of Director of Publications Anthony Calnek, together with Managing Editor Elizabeth Levy, Assistant Editor Jennifer Knox White, and intern José Ramiro Higuera. We are indebted to Lester Chin, Kent Hunter, and Saeri Yoo Park of Frankfurt Balkind Partners, design consultants for this publication. Ms. Blunck, Mr. Drutt, and Mr. Seifert prepared the artists' biographies, and Mr. Drutt, Ms. Fröhne, and Mr. Seifert compiled the bibliographies. We wish to thank all the authors for their thoughtful texts.

On behalf of our two institutions, I extend my gratitude to the artists themselves, for their enthusiastic participation in the planning and installation of this exhibition. Nam June Paik generously made available his spectacular video wall *Megatron*. We are grateful to him, and to Jung Sung Lee and his assistant Sung Koo Joh, who programmed this work for exhibition at the Guggenheim. I would also like to thank Steina and Woody Vasulka for lending their important early work *Matrix I* to the exhibition. Toshio Iwai and Bill Seaman lent their own artworks, both of which were developed during residencies at the Institute for Image Media at ZKM. Ingo Günther refabricated key elements necessary to realize his installation. I must also thank Morton and Marlene Meyerson for lending Jenny Holzer's untitled installation from the 1990 Venice *Biennale*. I am most appreciative to Vasif Kortun, Director of the Center for Curatorial Studies, Bard College, for generously agreeing to lend Bill Viola's *The City of Man* from the center's Rivendell Collection of Late Twentieth-Century Art. The artists' assistants and technicians must also be thanked for their invaluable contributions to the success of this project: Paul Miller of Sunrise Systems, and Jen Rork, assistant to Jenny Holzer; Sukae Suzuki, assistant to Mr. Iwai; Jochen Saueracker, assistant to Marie-Jo Lafontaine, and Dion Kliner and James Sheppard, who fabricated her work for this exhibition; Juliet Myers, assistant to Bruce Nauman; John McEvers, Blair Thurman, Andrew Norton, and John Huffman of Mr. Paik's studio; Bruce Hamilton, assistant to the Vasulkas; and Kira Perov, Claire Johnston, and Tom Piglin of Mr. Viola's studio.

Numerous people have provided vital counsel and support during the realization of this exhibition, including Jeanne Greenberg; Frederick B. Henry, President, The Bohen Foundation; Jean-Claude Meyer; Adrienne Wortzel; Robert Riley, Curator of Media Arts, San Francisco Museum of Modern Art; Holly Solomon, Holly Solomon Gallery; and Lori Zippay, Director, Electronic Arts Intermix.

Equipment and services for *Mediascape* have been provided by ArtView; Yamaha Corporation of America Keyboard Division; Silicon Graphics, Inc.; and Reuters America, Inc. Fine Arts Risk Management, New York, provided insurance for much of the equipment. We are also pleased to welcome *Wired Magazine* as the media sponsor for the exhibition.

Finally, and most importantly, this exhibition and the collaboration between the Guggenheim and ZKM have been made possible only through the participation of Deutsche Telekom. The third-largest telecommunications carrier worldwide, Deutsche Telekom has long fulfilled its beliefs that art is communication and that art unites people. Under the guidance of Dr. Ron Sommer, Chairman of the Management Board, the company remains determined to enhance its position as a global leader in high technology and telecommunications. By providing the resources for galleries at the Guggenheim Museum SoHo to be dedicated to multimedia art, and by providing access to new and exciting technologies for cultural applications, Deutsche Telekom has made a commitment to contemporary art and society that will resonate for many years to come.

Thomas Krens

Director, The Solomon R. Guggenheim Foundation

VIDEO ART

Heinrich Klotz

BEGINNINGS

As early as 1958, Wolf Vostell used technical and electronic devices in his “dé-coll/ages,” incorporating flickering TV screens into his artworks. But the true birth of video art occurred in 1963, with an exhibition of Nam June Paik’s works incorporating manipulated TV sets at Galerie Parnass in Wuppertal, Germany, and with Vostell’s *6 TV Dé-Coll/ages*, shown at Smolin Gallery in New York the same year.¹

These early examples of video art grew out of the artists’ involvement with Fluxus. Paik and Vostell were both members of this international group of artists, participating in Fluxus performances in Wiesbaden and Düsseldorf in the first years of the 1960s. Rebellious yet unabashedly playful, the Fluxus group reveled in provocative gestures. Its members undoubtedly encouraged Paik and Vostell to undertake their challenging experiments in mixed-media installations.

Another important influence on Paik was Karl Otto Götz, an exponent of Art Informel who taught at the Düsseldorf Kunstakademie. Since 1935, Götz had been engaged in experimental filmmaking; like Hans Richter and Viking Eggeling, he had used the medium to set abstract forms in rapid motion. Götz’s films may well be the most important link between the historical avant-garde’s experimental films and the moving images of video art. Edith Decker recalls that at the opening of his 1963 show at Galerie Parnass, Paik explicitly thanked Götz for providing a crucial impulse toward the use of kinetic images.²

The two contemporary artists Paik most admired and drew inspiration from were Joseph Beuys, who was beginning to draw attention in Düsseldorf at the same time as the Fluxus group, and John Cage. Paik first met Cage in 1958, during the Internationalen Fereinkursen für Neue Musik (international summer courses for new music) in Darmstadt, near Frankfurt. Paik learned from Cage a new concept of communication, which redefined and expanded the audience’s participation in the performance of a work of art. Even more important, however, were Cage’s principles of chance and indeterminacy. (Explaining one of his compositions, for instance, Cage stated that the “notes were determined by imperfections in the paper upon which the music was written. The number of imperfections was determined by chance.”)³ Chance provided Paik and many other artists of the 1960s with the conceptual foundations of a new aesthetics. Embracing chance as an aesthetic principle produced results similar to those of classical Modernism: in music, the abandonment of a tonal sequence predicated on harmony; in painting, the espousal of abstraction, which, rejecting mimetic representation, frees color from “objective” standards of “correctness.” Paik has used chance to determine the rapid sequences of abstract shapes in many of his video works.

MEDIA TECHNOLOGIES

During the 1960s, the development of video sculpture remained tied to Paik, who moved from Germany to New York in 1964. When he exhibited his *TV Cross* at the Tekniska Museet in Stockholm in 1966, video sculpture came into its own as a new art form. A cruciform arrangement of eight video

monitors displaying abstract shapes in rapid succession, the work was shown two years later at Galleria Bonino in New York. It may have been the first appearance of a video sculpture in an exhibition space dedicated to the fine arts.

It took a long time for other artists to realize the potential of video installations, and it took even longer for a large audience to accept and even embrace the new art form. Video’s moving images share an obvious affinity with those of television, and this fosters among audiences a tendency, however unjustified, to implicate video art in the sins and platitudes of commercial broadcasting. In the past ten years, however, there has been a marked shift in attitude, which, like the history of video art as a whole, is intertwined with the development of new technologies, among them those enabling closed-circuit video and large-screen projections.

With closed-circuit video, an image of the viewer is included in the video picture that he or she views. Thus, closed-circuit can suggest an identity between the space of the viewer and the realm of the artwork. During the early stages of the technology’s development the image appeared only after a slight delay, but now it can appear in real time. This innovation marked a significant step toward interactivity, which has decisively changed the nature of video art.

Beginning around 1982, Jeffrey Shaw and other video artists have created works using large-screen projections of viewer-manipulated images, and this development has led to a fundamental shift in our perception of images and our understanding of what constitutes a work of art. Interactivity and large-screen projection, which today often complement each other, started out as separate phenomena—Lynn Hershman’s first interactive installation, *Lorna* (1979–83), for instance, used an ordinary TV screen. The contemplative calm of the viewer who stands before the static image of traditional art has been replaced by the viewer’s active intervention in the dynamic images of the electronic age.

THE AESTHETICS OF VIDEO ART

Video art demands that we redefine our modes of aesthetic perception. This is due to several inherent characteristics and possibilities of video:

1. *The continuous changing of the moving image.* The moving image does not permit contemplative absorption; rather, as we follow the constantly changing images, our attention focuses on drama, narrative, or the variations of mutable forms. Thus, with video art, the nineteenth-century ideal of delimitation and transcendence of self through aesthetic contemplation is no longer possible.
2. *The linking of numerous images and the dispersal of vision.* The parallel screening of different videotapes on stacked monitors presents a multiplicity of synchronous images, fostering a nervous tension and a dispersion, or dissipation, of the gaze instead of focused concentration. (Works that display the same image in uniform synchronicity on multiple monitors, on the other hand, may induce a sense of calm.)

3. *The unfolding of sequences of images over time.* In this aspect, video art corresponds to the aesthetics of film—an aesthetics of narrative and development rather than one of perception at a glance. The static being-there of the immutable image is replaced by an evolving image sequence, and the work of art becomes a journey rather than a presence that can be encompassed in one glance. Video is distinguished from film, however, by the simplicity of its use: like paint and brush, its cassette format allows a spontaneous approach.

4. *Spatial simulation.* Video and electronic images permit the implementation of spatial effects, and the result is a heightening of the illusion of depth, far beyond that achieved by perspective painting. This path toward a simulated perceptual reality leads to the immersive environments of virtual reality.

5. *The immateriality of the images.* Unlike paintings, media images do not exist in a largely unaltered state, but as pixellated possibilities that need to be “switched on.” The media image makes its appearance in the monitor’s rays, without being there with any permanence. Mechanically produced and reproduced, it is “cold”—a technological image that bears no trace of its production. The media image possesses no “aura,” to use Walter Benjamin’s term. This is not to say that the cold, technological image cannot be a work of art. Its artistic essence emerges over the duration of its narrative, its composed sequence of images.

As it is immaterial and devoid of aura, the technological image can be endlessly multiplied without being robbed of its “authenticity.” By nature reproducible, the media artwork exists only in “copies,” quite like an engraving or woodcut, and the number of copies that are made is strictly arbitrary. Indeed, a video’s master tape will fade, only to be renewed in its copies. Since it cannot be appraised as a unique, “original” object, a video’s value as a work of art eludes the traditional standards that are applied to a collector’s—or investor’s—object.

6. *The capability of the viewer to influence the image interactively.* Interactivity alters the traditional conception of the artistic image as an object on display. The interactive image does not ask to be silently contemplated but demands some form of action. As with all moving images, the conventional notion of aesthetic perception as “disinterested contemplation” (to use Arthur Schopenhauer’s term) is dispersed, and the awed silence of pure looking makes way for the joyful exploration of an interactive world. The viewer becomes a player, enjoying the freedom of intellectual and sensual games. A playful modification of the given within limited possibilities, interactivity makes reference to the limits of what is visually set in motion, the limits of the work of art, the limits of fiction. It approaches reality but is never reality itself.

A HISTORY OF IMAGES

The characteristics of video art that distinguish it from what came before underscore the fact that a new art form has emerged, one with its own

rules and concepts—the latest form in the long history of art mediums and their applications. The true significance of the moving image and its technologies is revealed when we relate video to the larger history of artistic image making.

The history of Western art forms begins with the emancipation of the painted image from a fixed support, a development that would ultimately lead to the autonomous image as an aesthetic object.⁴ Around 1180, the first movable panel paintings emerged, in the form of altarpieces painted on wood—surrogates for the golden tablets of the early Middle Ages. Over the fifteenth and sixteenth centuries, the image separated from the altar, eventually to become paintings on canvas. Also in the fifteenth century, along with the birth of movable type in 1445, was the invention of the woodcut (ca. 1400) and engraving (ca. 1430–40). For the first time, images were able to be reproduced in sizable quantities. In contrast to paintings, which were commissioned by individual patrons, woodcuts and engravings addressed a general audience, and they contributed significantly to the formation of public opinion. Although the works were still inscribed with the traces of manual production, a technical process mediated between the hand-cut image on the plate and its multiple prints; thus, these forms marked the first step toward mechanical reproduction. Another new medium was born in the late 1790s, with Aloys Senefelder’s invention of lithography, which allowed the artist’s brushstroke to be transferred onto a print, thus adding a dimension of gestural spontaneity.

The development of photography in the first half of the nineteenth century introduced a new quality to art making, for in the photochemical production process, direct, physical human touch is entirely absent. For this reason, the photograph was thought of as a “cold” mechanical image, and until recent times was precluded from being considered a medium of genuine art.

With the invention of cinematography at the end of the nineteenth century, the concept of the image expanded further, as images began to *move*. The rise of Modernism was interconnected with the rise of the motion picture; while perspective—the great invention of the Renaissance—had added the appearance of space to the flat image surface, movies added the dimension of time, turning narrative development into an unfolding image.

The late-nineteenth and early twentieth centuries brought further variations on the photographic image: the three-dimensional stereoscopic photograph, the backlit transparency, and the color photograph. At the same time, photomechanical printing created a new type of image reproduction, which caused a revolution in the way images were perceived by the public. Broken down into dots and reconstructed by the viewer’s eye, the machine-reproduced photograph anticipated the pixellated electronic image. The latter’s most pervasive form is undoubtedly television, which has arguably triggered the most intensive image consumption in history. (Given that a person in the industrialized world spends, on average, three to four hours a day looking at a TV screen, one can gauge to what degree this form of image perception has conditioned the contemporary mind.)

Today's information technologies have provided a multitude of new image types, many of which are based on digital data processing. Now, in addition to traditional mediums such as oil painting, engraving and woodcut, etching, mosaic, lithography, photography, film, and halftone reproduction and process printing, we have many kinds of electronic images, with different forms of dissemination: television and video images, computer-generated images, video animation, scanned images, images stored on CD-ROM or traveling through the Internet, and so on. The most intense experience of image perception, however, is provided by the artificial, interactive spaces of virtual reality, in which, immersed in a simulated environment projected onto the LCD screens of 3-D goggles, the viewer uses his or her body's responses to navigate through the space at will.

This brief history clearly shows that the creation of image types and the corresponding changes in image perception are among the most important themes of cultural development.

THE TYPOLOGY AND PUBLIC PERCEPTION OF VIDEO ART

Art has always responded to new technologies, appropriating the materials of culture in different ways. The material of video art is the monitor image or, more accurately, the television picture, which, since the 1950s, has been available to a mass audience. Yet video artists have generally assumed a critical stance toward the television picture, adopting the technology while challenging its contents. By employing a commonly used technological material in a subversive way, they present a critical counterforce to entertainment and advertising, the most popular forms of communication today.

Video art is nonetheless subjected to the same skepticism and critical scrutiny that we bring to bear on television, as our annoyance at the glut of television imagery has come to determine our attitude toward anything a monitor shows. It is therefore not surprising that video artworks sometimes use aesthetically reconfigured responses to television, but their critical nature is not always understood by audiences.

Paik's was the first and most immediate artistic response to television's moving images. In his work, he "took revenge" on television by speeding up its pictures until they became barely decipherable flickering shapes. Oscillations between figurative and abstract images, they suggest, nonetheless, a compositional intent, a kind of longing for order amid complete disarray.

Bill Viola's response has been quite the opposite: Viola resists television's constant motion by almost arresting it. In his video installation

Threshold (1995), an LED signboard is mounted on the outer walls of a room; messages carrying the latest news flash across it in nervous haste. Passing through an opening that intersects the LED display, one enters a darkened space where two-meter-high images of human heads are projected on three walls. One expects movement, but nothing stirs; the heads simply lie there, on pillows, immobile, seemingly dead. Startled, one looks for a flinch, a twitch, a sign of life. Only after one has all but given up, apparently confronted with the stillness of death, does one recognize that these people are breathing, their chests moving up and down ever so slightly. They are sleeping: it is a joyful discovery, and one clings to the barely perceptible movement, grateful that these pictures are, after all, moving, that the stillness is not complete. The scene's power lies in this contrast; it is an aesthetics of antithesis and defiance, an aesthetics of the unexpected. The human images, which appear in photographic form, credibly assure us that we are still there, that we exist. Outside of the room, we experience the actuality of changing events, with the rapidly moving LED letters carrying the superficiality of countless occurrences, but on the inside, we are confronted with the state of stillness, of sleep, of eternity.

THE HUMAN IMAGE

Threshold breaks a near-taboo of recent art—the taboo against the direct representation of the human figure. Video art emerged at a critical juncture in art discourse, lending a renewed viability to fictional narratives, and linking these narratives to the representation of the human image.

Like Viola, Paik has invented images that are completely alien, even antithetical, to television, human images of superb strangeness. In his well-known work *Beuys*, which was included in *Documenta 8*, he inserted scenes from a performance by Beuys into rapid image sequences. The scenes show Beuys transformed into a screaming coyote; struggling for words, howling, he fights to regain language, in order to metamorphose back into a human being; he is a man turned beast, grasping in vain for human expression. Certainly not the stuff for television broadcasts, this is the expression of a profound dissent, a desperate quest to reconnect to humanity.

The image of man at the outer limits of humanity is a recurring theme in the work of many important video artists. In Nauman's *Raw Material: Brrr*, video projections show a human face uttering nothing but nonsensical sounds. It is the image of a stupid, slobbering, abject, and antihuman figure, the very opposite of television's usual telegenic glamor. Nauman depicts humanity after the so-called "loss of center"—the brutish human being of the twentieth century, who has shed the "beautiful soul" of Romanticism and the humanist ideals of classical antiquity. In his work, we

experience the vision of humanity introduced by Francisco de Goya and elaborated by the Surrealists: man at his most remote from God's image, from an ideal whose very absence makes it the work's most urgent reference.

This is the only way left to articulate the human image. The representational figure has lost all credibility in painting, but what has ceased to be acceptable in other art forms, what has caused the embarrassment associated with insipidity or the discomfort of *déjà-vu*, can now be expressed in a new way and with elemental directness. Video art has expanded our range of expression and reintroduced subjects that had been excluded from most artistic representation.

The aesthetics of the historical avant-garde, which attempted to open the border between art and life and to suspend the difference between reality and art, has been supplanted by fictional narratives. The more television imagery has tried to fraternize with reality, the more video imagery has stressed the difference. Although it often references reality, video art emphatically maintains its own narrative worlds.

THE POETICS OF VIDEO ART

All of video's narratives can be related to the classical categories of aesthetics. It is possible, in fact, to establish a new poetic typology.

When video takes the place of film, it is commonly used not for long epics but for short subjects, for which film would be inappropriate, as in *Das Zersprungene Glas* (*The Broken Glass*) by Dieter Kiessling. The video's opening title, "Dieter Kiessling—Das Zersprungene Glas," is displayed vertically on the screen, but while we read it, the glass plate bearing the title suddenly drops to the floor and shatters as the camera tilts to capture its fall. That is all. The title keeps its promise with unexpected immediacy, for it is the whole work, its own story. This is the shortest form of storytelling, the most concise version of narration. By classical categories, the work is a video poem or perhaps a video aphorism.

While the epic novel has remained the domain of the movies, video tends toward brevity, a tersely made point, sparse hints. Videos usually take the form of interpolation, annotation, even haiku. With video, there is a broad range of expressive possibilities that supplement, expand, and enrich earlier techniques of art. As with photography and film before video, these new forms of expression will not destroy the traditional arts, but will open up new forms of representation.

INTERACTIVITY

There is a type of media art that completely evades all traditional classifications and can no longer be addressed within the framework of

classical poetics: interactive media art, artworks that are intrinsically interactive. How can this possibly be art? Hasn't art always been made for the purpose of contemplation; doesn't the ultimate fulfillment of art lie in its quiet presence before the eyes of the beholder? There is a suspicion that interactive art is appropriating the performing arts to create an indigestible mixture that defies all proper categorization.

One example: I am sitting on a bicycle facing a large projection screen. On the screen, I see the streets of Manhattan, with its buildings transformed into giant letters. I am pedaling through the city, steering with the handlebar, riding through the canyons of midtown and down Fifth Avenue. The three-and-a-half-meter-tall screen pulls me in, inviting me to navigate along the corridors of letters: down Broadway, toward the World Trade Center, left on Wall Street, and on to the Seaport. The colorful scenery of letters, streets, and sky is an artificial world, a fictional city, a vision, a surreal environment of forms. With my own bodily movements I am constantly changing the image before me, determining and altering its form through my active intervention. It is a playful experience. In this installation by Shaw, *The Legible City* (1988–89), the work of art turns into play, the viewer into a *homo ludens*. To question whether this is still art becomes meaningless: in *The Legible City*, we trespass boundaries, move freely across categories, and liberate ourselves from definitions.

1. Edith Decker has discussed the beginnings of video art in *Paik—Video* (Cologne: DuMont, 1988).
2. *Ibid.*, p. 21.
3. John Cage, *Silence* (Middletown, Conn.: Wesleyan University Press, 1973; 1979), p. 27.
4. Hans Belting, *Bild und Kunst: Zur Geschichte des Bildes vor dem Zeitalter der Kunst* (Munich: C. H. Beck, 1990).





INGO GÜNTHER

IM BEREICH DER WEST-WIND-WELT, 1991

Two flags hoisted on metal staffs flap in an artificial wind, approaching each other without ever touching. In place of the emblem that usually identifies a piece of fabric's symbolic meaning as a flag, here each rectangle of pure-white material is vividly colored by projected images, virtual patterns and signs. Intentionally left blank, their neutral surfaces offer themselves as projection screens for a variety of national emblems, ideological symbols, and portraits of leaders of every political coloration. On the flag to the left, photographs of outer space and fighter jets blend with a projection of the American flag's stars and stripes. They constitute a symbolic compound, signifying the basic tenets of democracy and the world influence of the United States. The other flag displays a hammer and sickle on a red background, the graphic emblem of Soviet Communism. This image appears in sequence with portraits of Mikhail Gorbachev, the personification of *perestroika*, which was in full bloom in the year the work was made. The blankness of the fabric, together with the constant changing of the projected images, suggest the fundamental interchangeability of political programs and ideological values.

For Ingo Günther, political events have a fascinating aura, for while they are experienced as complex occurrences in "real time," they acquire a historical dimension almost immediately. Many of Günther's installations are based on current political tendencies and their global impact. After a series of early video works dealing primarily with the phenomenon of movement, he began to explore in greater detail the possibilities of the electronic media in the visual arts. In his research, he encountered the codified language of the military, a metalanguage that is intentionally made incomprehensible to outsiders. The complex interaction between communication and control—the different means of transferring information and the strict censorship of such data; the obstruction of communication and the role of the military as an agent of control in the distribution of information; the justification of covert action as the legal instrument of the government's defense of national and ideological identity—opened up a wide field of possible artistic strategies confronting the military/industrial information and technology monopolies. In the 1980s, Günther began to experiment with satellite images taken from outer space. These images show the effect of human activity on the climate and ecology of the earth, but also reveal military data and strategic positions. He transposed them into a computer-controlled three-dimensional projection, in which political power structures and their strategic planning are exposed as a self-governing system; the work suggests that each power block's constant surveillance of its own positions and those of the enemy is completely disconnected from any individual experience of reality.¹

Im Bereich der West-Wind-Welt continues themes found in Günther's earlier work, adopting a critical position in relation to the power of the state and its representatives, its systems and insignias, its ideological programs and political subjects. The opposing flags, symbolizing the two superpowers and the polarized hostility that characterized their relationship for decades, represent Günther's reaction to the shifts in world politics that were occurring as he conceived the installation. Günther responded to the easing of tensions between the United States and the former Soviet Union—to a large degree, the outcome of Gorbachev's *perestroika* and *glasnost* politics—with a formulation that is less emphatic than the approval with which the situation was generally met; believing that it could be judged only from a historical perspective, he created a work that represents an ambivalent response. That the media played a crucial role in this development—even in the Soviet Union, under the strict censorship of Communist rule—is suggested in Günther's installation by the many images drawn from both the rhetoric of Communist propaganda and the Western media. Thus it would seem that the fall of the Iron Curtain could also be interpreted as a victory of the media over the proclaimed integrity of political programs.

Oriented toward each other, the ideological banners evoke the rapprochement of the Soviet Union and the United States. Historically, the waving flag has served as a symbol of rebellion and the willingness to fight; in this sense, it seems to represent a mindset counter to political accord. Yet the thawing of relations between former political enemies is in itself a revolutionary event. The main impulse behind this revolution, however, was not the utopian vision of the Communist International, which once tried to unify the masses, but, in the Soviet Union, the concrete promise of joining the capitalist world—the world where the "West wind" blows. The opposing flags in Günther's installation, with their simulacra of the media world, illustrate the easing of tensions and the dissolution of ideological differences, leading to globalization.

Günther's casting of current events in symbolic form, despite their short-lived relevance in periods of political and social change, gives evidence of the artist's concern for capturing the figurative sense of the historic value and significance of complex developments and processes that cannot be captured through documentary photographs. Thus, the artist plays the role of Walter Benjamin's metaphorical angel, who flies through time, driven by the wind of history, with its back toward the future, facing the past.

In the clusters of projected images and also in the work's themes, *Im Bereich der West-Wind-Welt* can be compared to Robert Rauschenberg's silk-screen paintings. In them, Rauschenberg uses existing photographs—that is, he reproduces reproductions; similarly, Günther projects onto his "canvases" images he has taken from the media. Rauschenberg's manipulation of images—taken from different viewpoints, mounted next to each other, and sometimes repeated—is similar to the way Günther cuts and superimposes his video projections. Projected onto a surface that is itself in motion, the moving images in Günther's work appear partially blurred, thereby communicating their media character; in Rauschenberg's silk-screens, the grainy quality of the magazine pictures serves the same purpose. In both cases, the visual quality of the images forces the viewer to remain aware of their illusionary character. Both works also contain gestic attributes—the application of paint in Rauschenberg's case, the moving flags in Günther's installation—and use vibrant television-type colors; while Rauschenberg enhanced his colors with special inks, the effect is similar to the vibrant colors of the video projections on Günther's flags. The interaction between images that appear to merge in the viewer's perception brings the works of Rauschenberg and Günther very close to abstraction.

It is inconceivable that Günther, who has lived in the United States for over ten years, could employ the symbolically and emotionally charged motif of the flag in an almost abstract sense without having the Pop art icons of Jasper Johns in mind. The question so frequently asked in front of the work of the American painter—"Is it a flag or a painting?"—could thus be rephrased for Günther's installation: "Is it a flag or is it an image?"

1. See Jürgen Schweinebraden, "C3: Command-Communication-Control and Intelligence," in *Documenta 8*, exh. cat. (Kassel: Documenta, 1987), vol. 2, p. 90.

Ursula Frohne

BIOGRAPHY

Ingo Günther was born in 1957 near Hannover, Germany. He studied ethnology and cultural anthropology at the Johann-Wolfgang-Goethe-Universität in Frankfurt in 1977. From 1978, he attended the Düsseldorf Kunstakademie, where he studied with Fritz Schwegler, Günther Uecker, and Nam June Paik, graduating with a Master of Arts in 1983.

During the 1970s, Günther traveled extensively in North Africa, North and Central America, and Asia. In 1983, he received a stipend from the Düsseldorf Kunstakademie for a residency at P.S.1 in New York. He received a DAAD grant in 1984, and a Kunstfond grant in 1987. In 1988, he was awarded the Preis des Kulturkreises des Bundes der Deutschen Industrie, and in 1996, he was presented with a Stankowski Award. Between 1990 and 1994, Günther was a professor at the Kunsthochschule für Medien, Cologne.

Günther's early work in video led him to pursue media- and journalism-oriented projects in print, television, and art. He has worked with NHK TV in Japan as an artist, correspondent, and writer, and in 1989, he founded Kanal X, the first independent television station in Eastern Europe.

Works by Günther were shown at the Nationalgalerie Berlin, 1983 and 1985; Venice *Biennale*, 1984; *Documenta*, Kassel, Germany, 1987; Ars Electronica, Linz, Austria, 1991; Centro Cultural de Belem, Lisbon, 1994; and Hiroshima City Museum of Contemporary Art, 1995.

pages 12–13 Ingo Gunther,
Im Bereich der West Wind Welt
(*In the Realm of the West-Wind*
World), 1991. Two-channel video
installation, 30 minutes, color;
installation space variable,
approximately 4 x 5 x 6 m.
ZKM, Center for Art and Media
Karlsruhe.

SELECTED EXHIBITION CATALOGUES

EXHIBITION CATALOGUES

Documenta 8. Kassel: Documenta, 1987.

Universalpoesien. Hamburg: Kunstverein Hamburg, 1988.

Arbeit in Geschichte – Geschichte in Arbeit. Hamburg: Kunsthaus und Kunstverein, 1988.

World Processor – Das andere Bild der Erde. Hamburg: Produzentengalerie, 1989.

Video-Skulptur: Retrospektiv und Aktuell, 1963–1989. Cologne: Kölnischer Kunstverein and DuMont Kunsthalle, 1989.

World Processor. Tokyo: Shogakukan, 1990.

Ars Electronica 91. Linz: Ars Electronica, 1991.

Baltic Biennial. Rostock: Kunsthalle Rostock, 1992.

The Binary Era. Brussels: Musée d'Issel, 1992.

Moving Image: Electronic Art. Karlsruhe: ZKM; Munich and Stuttgart: Oktagon, 1992.

Humpty Dumpty's Kaleidoscope. Sydney: Museum of Contemporary Art, 1992.

Global Change/Erdsicht. Bonn: Kunst- und Ausstellungshalle der Bundesrepublik Deutschland, 1992.

Kunst im Weltmasstab. Kiel, Germany: Kunsthalle zu Kiel, 1993.

Integral. Berlin: NGBK, 1993.

MultiMediale 3. Karlsruhe: ZKM, 1993.

40th International Short Film Festival. Oberhausen, 1994.

Multiple Dimensions. Lisbon: Centro Cultural de Belem, 1994.

Fotofest 94. Houston: George Brown Convention Center, 1994.

Video Skulptur in Deutschland. Stuttgart: Institut für Auslandsbeziehungen, 1995.

After Hiroshima. Hiroshima: Hiroshima City Museum of Contemporary Art, 1995.

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JENNY HOLZER

UNTITLED, 1990

Since the late 1970s, Jenny Holzer has explored in her art strategies of public address and the production of knowledge, using language as her primary means of expression. Rejecting the pictorial and formal systems of painting, her works appropriate the technological devices of the mass media to examine the construction of social relations and political ideology. Beginning with inexpensively printed posters and stickers, Holzer's art has steadily evolved in sophistication, expanding into a lexicon that includes manufactured brass plaques, advertising billboards, television, radio, electronic signs, clothing, benches, and sarcophagi. For much of her career, Holzer has presented her work both inside and outside the traditional locations for art; it has often appeared in public spaces, including parks, bus shelters, airports, and bank windows. Recently, in gallery and museum installations, Holzer has created contemplative environments reminiscent of chapels or burial chambers, introducing into her investigation of how we define ourselves the role of religious institutions.

Holzer's two earliest series were *Truisms* (1977–79) and *Inflammatory Essays* (1979–82). Composed of a litany of one-line statements, the *Truisms* are pithy, cynical observations on behavior and desire (such as CHILDREN ARE THE CRUELEST OF ALL, CHILDREN ARE THE HOPE OF THE FUTURE, and PROTECT ME FROM WHAT I WANT). The *Inflammatory Essays* are paragraph-long texts, many of which are angry or passionate exhortations (A CRUEL BUT ANCIENT LAW DEMANDS AN EYE FOR AN EYE. MURDER MUST BE ANSWERED BY EXECUTION. ONLY GOD HAS THE RIGHT TO TAKE A LIFE AND WHEN SOMEONE BREAKS THIS LAW HE WILL BE PUNISHED. . . .) Both series were initially produced as offset posters and pasted anonymously to the façades of buildings, at construction sites, in subways, and in other locations where a profusion of graffiti and weathered commercial ephemera is found.

A turning point in Holzer's art occurred in 1982, when, through the auspices of the Public Art Fund, the *Truisms* were broadcast on the Spectacolor electronic signboard in New York's Times Square. Situated in the midst of the world's most famous site for electronic signage, Holzer's art was a jarring intervention into the more mundane flow of news reports and seductive commercial messages. From that point forward, electronic technology became a key medium for her work, both as an aesthetic device and as a subject of investigation.

Holzer's award-winning installation at the 1990 Venice *Biennale*, for which *Untitled* was first created, offers a summation of the artist's work to that point. Two antechambers, situated on opposite sides of the rotunda of the U.S. Pavilion, were installed with marble benches lining the perimeters of the rooms and diamond-patterned marble floors; both the benches and the floors were inscribed with various texts by the artist.

These antechambers led to two additional rooms, which were flooded by the searing lights of multicolored LED signs affixed to the walls. She likens the reflective surfaces of the marble floors to the waters of Venice, and explains, "The idea for the antechambers, with my texts on the floors, came from the old doge palaces, where you waited for your fate to be decided. And my texts about life and death—I know that sounds pretentious, but that's what my work's always been about—fit right into that worried atmosphere."

Untitled is the most lively and least brooding of the rooms in the original installation. Eleven horizontal LED signs are situated on the far wall as one enters the room, and are flanked by another five horizontal signs on each side wall. The work brings together selections from earlier projects by the artist—*Truisms*, *Inflammatory Essays*, *The Living Series* (1980–82), *The Survival Series* (1983–85), *Under a Rock* (1985–86), *Laments* (1988–89), and *Child Text* (1989–1990)—programmed in English, French, German, Italian, and Spanish. A veritable Tower of Babel, where dissonant languages and statements clash in a cacophony of color, the installation offers an overview of Holzer's different voices, from her scathing meditations on everyday life (such as US ABUSE OF POWER COMES AS NO SURPRISE) to more reflective expositions (for example, IF YOU'RE CONSIDERED USELESS NO ONE WILL FEED YOU ANY MORE). The images of the signs mirrored in the highly polished floors (in the current exhibition the floor is wood, rather than the marble surface of the *Biennale* installation) creates a state of suspension or dislocation, enveloping viewers in a sea of light and language.

1. Jenny Holzer, quoted in Stephen Henry Maddoff, "Venice: Site Specific," *Art News* 89, no. 7 (September 1990), p. 177.

Matthew Drutt

BIOGRAPHY

Jenny Holzer was born in 1950 in Gallipolis, Ohio. She received a Bachelor of Fine Arts in printmaking and painting from Ohio University, Athens, in 1972, and in 1975, she entered the Master of Fine Arts painting program at the Rhode Island School of Design. While there, she began to introduce language into her work. Holzer moved to New York after earning her degree at R.I.S.D. in 1977, and enrolled in the Whitney Museum of American Art's Independent Study Program. That year, she created her first all-text works, the *Truisms* series, printing them on paper, which she pasted up anonymously around the city.

Holzer has been the recipient of several important awards, including the Blair Award, presented by the Art Institute of Chicago, 1982, and the award for best pavilion at the Venice Biennale, 1990.

In addition to the numerous solo and group exhibitions in which her work has appeared, Holzer has created many public projects, among them a *Truisms* display on the Spectacolor Board in Times Square in 1982, sponsored by the Public Art Fund, and a series of public spots for MTV in 1989. She has also published several books, including *A Little Knowledge*, 1979; *Black Book*, 1980; *Hotel* (with Peter Nadin), 1980; *Living* (with Nadin), 1980; *Eating Friends* (with Nadin), 1981; *Eating Through Living* (with Nadin), 1981; and *Truisms and Essays*, 1983.

SELECTED EXHIBITION CATALOGUES

INDIVIDUAL EXHIBITIONS

Jenny Holzer: Signs. Des Moines: Des Moines Art Center, 1986.

Jenny Holzer: Signs and Benches. Brooklyn: Brooklyn Museum, 1988.

Jenny Holzer: Messages. London: Institute of Contemporary Arts, 1988.

Jenny Holzer. New York: Solomon R. Guggenheim Museum, 1989.

The Venice Installation. Buffalo, N.Y.: Albright-Knox Art Gallery, 1991.

Jenny Holzer. Mito, Japan: Contemporary Art Center, Art Tower Mito, 1994.

GROUP EXHIBITIONS

Jenny Holzer, Cindy Sherman: Personae. Cincinnati: Contemporary Arts Center, 1986.

Jenny Holzer, Barbara Kruger. Jerusalem: Israel Museum, 1986.

Documenta 8. Kassel: Documenta, 1987.

Digital Visions: Computers in Art. Syracuse, N.Y.: Everson Museum of Art, 1987.

Committed to Print: Social and Political Themes in Recent American Printed Art. New York: Museum of Modern Art, 1988.

A Forest of Signs: Art in the Crisis of Representation. Los Angeles: Museum of Contemporary Art, 1989.

Image World: Art and Media Culture. New York: Whitney Museum of American Art, 1989.

Making Their Mark: Women Artists Move into the Mainstream, 1970–1985. Cincinnati: Cincinnati Art Museum, 1989.

Art et Publicité 1890–1990. Paris: Grande Galerie and Centre Georges Pompidou, 1990.

Culture and Commentary: An Eighties Perspective. Washington, D.C.: Hirshhorn Museum and Sculpture Garden, Smithsonian Institution, 1990.

High and Low: Modern Art and Popular Culture. New York: Museum of Modern Art, 1990.

Beyond the Frame: American Art 1960–1990. Tokyo: Setagaya Art Museum, 1991.

Devil on the Stairs: Looking Back on the Eighties. Philadelphia: Institute of Contemporary Art, University of Pennsylvania, 1991.

Metropolis. Berlin: Walter-Gropius-Bau, 1991.

The Words and the Images. Utrecht: Centraal Museum, 1991.

Allegories of Modernism: Contemporary Drawing. New York: Museum of Modern Art, 1992.

Territorium Artis. Bonn: Kunst- und Ausstellungshalle der Bundesrepublik Deutschland, 1992.

Amerikanische Kunst im 20. Jahrhundert: Malerei und Plastik 1913–1993. Berlin: Martin-Gropius-Bau; Munich: Prestel, 1993.

Rosebud: Jenny Holzer, Matt Mullican, Lawrence Weiner. Munich: Kunstbau Lenbachhaus München, 1994.

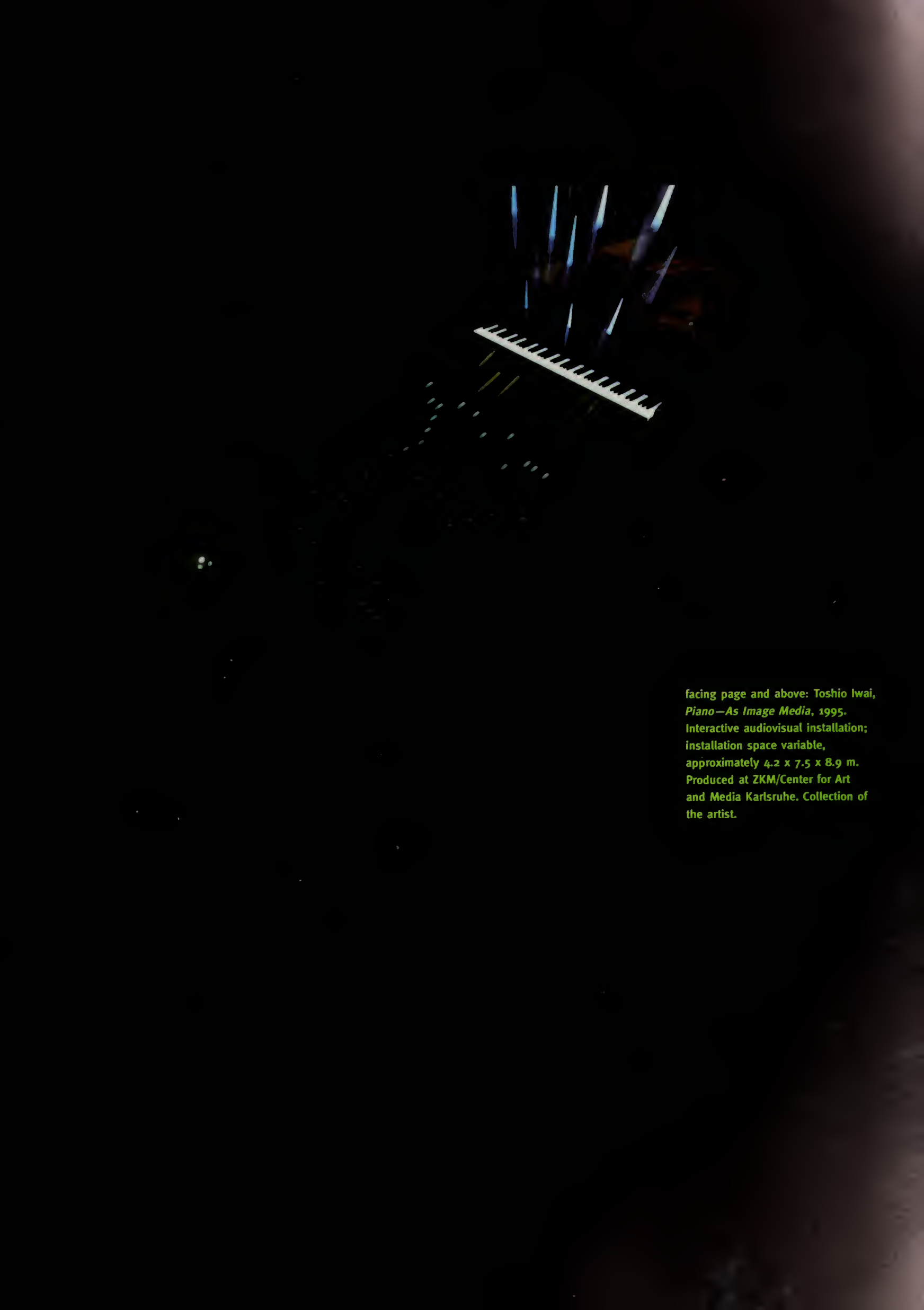
Transformers. New York: Independent Curators Incorporated, 1994.

In a Different Light. Berkeley: University Art Museum, 1995.

Féminin-masculin: Le Sens de l'art. Paris: Centre Georges Pompidou, 1995.

pages 16–17: Jenny Holzer, *Untitled*, 1990. Three-color LED signs; ten units, each .14 x 6.1 x .1 m; eleven units, each .24 x 4.47 x .11 m; installation area variable, approximately 6.45 x 10 m. Collection of Morton and Marlene Meyerson.





facing page and above: Toshio Iwai,
Piano—As Image Media, 1995.
Interactive audiovisual installation;
installation space variable,
approximately 4.2 x 7.5 x 8.9 m.
Produced at ZKM/Center for Art
and Media Karlsruhe. Collection of
the artist.

TOSHIO Iwai

PIANO — AS IMAGE MEDIA, 1995

Toshio Iwai's *Piano—As Image Media* combines a real grand piano with virtual images. The player uses a trackball to place luminous points, representing musical notes, on a horizontal projection plane. The points—MIDI signals that control the piano's strings—travel slowly toward the keyboard. Accelerating shortly before they reach their goal, they generate musical notes as they appear to hit the keys. Simultaneously, a computer-generated image rises from each "struck" key, projected by a video beamer onto a semitransparent projection plane mounted vertically above the keyboard. As the sound fades, the illuminated image loses speed and, rotating slowly, turns into a starlike crystal.

With all of the piano keys freely accessible via the trackball, the player can easily compose melodies. Not all melodies are possible, however: the structure of the virtual-manipulation device allows single notes, sound ornaments, clusters, and bizarre chords to be produced, but it is almost impossible to intentionally modulate the staccato of the sound explosions, and the length of the notes cannot be controlled. There is also no way to play melodies in accordance with the principles of counterpoint and classical laws of harmony, but "hybrid" melodies—for instance, those generated by rapidly firing the incandescent trace, like a handwritten signature, onto the projection plane—can be made. Thus the instrument can convert handwriting into a sound image, the luminous points constituting a notation that conforms with the laws of grammar or gesture rather than with those of music.

Iwai's declared goal is to open up a new field of experience by "combining physical objects and virtual images," a project that has particular significance "in a time when the new digital technologies supplant our physical experiences with virtual, media-ted ones."¹ This objective is markedly different from that of synesthesia. The notion of sound as a synesthetic medium is centuries old. It originated with the Pythagoreans, who translated musical chords into numerical proportions, and tried to deduct the ideal harmony of the celestial spheres from the movement of the planets. Revived by the Neo-Platonists during the Renaissance, it was immortalized in the theory of the different temperaments of musical expression (Phrygian, Lydian, Mixolydian, and so on). Nicolas Poussin, among other artists, tried to apply this theory to the world of colors, an endeavor that has continued to the present day; Vasily Kandinsky was one of its most prominent advocates, with his idea of a "color piano" and theory of "color tones," which he developed in the early part of this century. The underlying impulse of this pursuit has always been the search for a universal world harmony that would prove the divine nature of the origin of the cosmos.

This is not Iwai's intention. We know that harmonic melodies are not possible on his piano; indeed, melody plays only a secondary role. The

main purpose of Iwai's piece is to make the invisible processes of technology—which have become incomprehensible to us—visible again, to bring them back into the realm of the humanly perceptible. This method, which could be called the "principle of de-involution," is a theme that runs through Iwai's entire oeuvre. In his *Video Books* (1984), for example, television sequences were printed out image by image via a video printer, and these images were then reassembled into a flip book.

Iwai's method is only partly ironic. His work gives us the chance to perceive and experience things, and therefore it has a humanizing effect. We begin to play and to discover new correlations (like the discovery of different possible types of notation). As in all successful interactive artworks, the skillful "composition" of the technical environment sets the stage for the actions of the observer. These "instruments" do not require virtuosity—they invite us to play, to leave behind the *Homo sapiens* in favor of the *Homo ludens*. This effect might be the cause of *Piano—As Image Media*'s strangely sympathetic air, which makes us hear a scherzo in even the most chaotic staccato of sounds, and which invests the cold splendor of its blooming light crystals with warmth.

1. Toshio Iwai, "Piano—As an Image Media," in *MultiMediale 4*, exh. cat. (Karlsruhe: ZKM, 1995), p. 39.

Oliver Seifert

BIOGRAPHY

SELECTED EXHIBITION CATALOGUES

Toshio Iwai was born in 1962 in Aichi, Japan. He studied sculpture and mixed-media art at the University of Tsukuba, Japan, graduating with a Master of Arts degree in 1987. In 1992, he was artist-in-residence at the Exploratorium in San Francisco, and in 1994–95 was a guest artist at ZKM Karlsruhe.

Iwai created his first experimental animations in 1981, before turning to precinematic devices like flip books and zoetropes. Beginning in 1986, he became interested in computer games. In Japan, he is well known not only as a media artist, but also for the computer-generated virtual sets he made in 1990–91 for the science program *Einstein* on Fuji Television.

Iwai has participated in numerous international festivals and exhibitions, including *Images du Futur*, Montreal, 1987; *Artec*, Nagoya, 1989; *EXPO '92*, Seville, 1992; *Interactive Media Festival*, Los Angeles, 1994; *MultiMediale 4*, ZKM Karlsruhe, 1995; and *Le Biennale d'Art Contemporain de Lyon*, 1995–96. In 1994, ZKM Karlsruhe organized a survey exhibition of his works entitled *Toshio Iwai*, which traveled to Helsinki and Amsterdam.

INDIVIDUAL EXHIBITIONS

Toshio Iwai: Exhibition-Machine for Trinity. Tokyo: Laforet Museum Espace; Fukuoka: Art Gallery Artium, 1990.

Toshio Iwai. Karlsruhe: ZKM, 1994.

GROUP EXHIBITIONS

Tracing Time. San Francisco: Exploratorium, 1991.

MultiMediale 4. Karlsruhe: ZKM, 1994.

Le Biennale d'Art Contemporain de Lyon: Installation, Cinéma, Vidéo, Informatique. Lyon: Musée d'Art Contemporain, 1995.

Phantasmagoria: Pre-Cinema to Virtuality. Sydney: Museum of Contemporary Art, 1996.





MARIE-JO LAFONTAINE

LES LARMES D'ACIER, 1987

Marie-Jo Lafontaine is best known for her video installations, but her artistic point of departure was painting. Inspired by the work of Robert Ryman and Brice Marden, she began to examine the material quality of color when she was a student at the Ecole Nationale Supérieure d'Architecture et des Arts Visuels "La Cambre" in Brussels. She used dyed cotton woven into canvas, which was then attached to stretchers, to create black monochrome paintings. Unlike objects in which color and canvas merge, these works seem to embody Kazimir Malevich's concept of essential painting; Lafontaine applied Malevich's metaphysical ideas of expression to the production process, turning the medium itself into the works' formal theme. The strongly emphasized weave structure of these paintings permits color and texture to act together as a conceptualized monolithic unit. The subtle oscillation across borders of classification that is already present in these works grew, in the following years, into an interest in all the different forms of visual art. She began making multimedia installations that bring together sculpture, photography, painting, and video.

Lafontaine's monumental video sculpture *Les Larmes d'acier* was first shown at *Documenta 8* in Kassel, Germany, in 1987. It is the continuation of a frequent theme in the artist's work—the contradiction of Western culture after the demise of its stabilizing traditions, exemplified here in the pairing of Eros and Thanatos, violence and passion, power and pain, beauty and terror. Three athletic young men—embodiments, in their physiognomy, of cloned masculinity—are shown on the installation's twenty-seven monitors performing power-training exercises. The camera pans slowly across their faces; frozen into masks of stoic self-reference, they reveal the power trainers' determination to go to the limit and their attempts to suppress their pain. The camera moves gradually over mechanically contracting muscles, fixing finally on the steel skeleton of the weight machines, which seem to govern the monotonous rhythm of the men's movements. Their bodies are naked and sculpturelike; the machine appears to replace the self. This "mechanical ballet" of masculine bodies is accompanied by the music of Vincenzo Bellini's *Casta Diva*; the opera's dramatic intensity contrasts with the monotony of the physical exercise and acts simultaneously as a suggestive layer. At its climactic moment, the music's inner dynamic provides an exciting, contrapuntal echo to the men's weight-lifting routine. As the voice of Maria Callas reaches its highest pitch, the athlete bites his lower lip in response to his effort; agony and ecstasy converge, the pain of exertion turns into lust for exertion, agony is transformed into passion. The emotional expressiveness of the singing compounds the appearance of strength of the men's bodies, turning them into symbols of power; what enables the body to endure the regimen of discipline and pain, the work suggests, also enables it to exercise male dominance. When accompanied by the passionate sound of a female voice, exercising on the machine becomes a surrogate for love-making. In the tension between the severe, formal rigidity of the masculine stance and the emotional release of the female voice, a game of seduction unfolds, staged by Lafontaine as an equally erotic and ideological theme.

Les Larmes d'acier plays a key role in Lafontaine's oeuvre, because it projects a complex constellation of ideas onto a simple surrogate action: under the dictate of beauty, man, machine, power, and sexuality are transmuted into a totalitarian scheme. The music plays a crucial role, not only because of its ironic dismantling of empty pathos, but also because of its complicity with the entire composition. Apollo mistakes himself for Dionysus; and Narcissus aspires to become the Übermensch; we watch the

stages of this metamorphosis on the screens, where, the artist confesses, she is playing with our "most extreme fantasies":

1. the double meaning of the objectified body and the eroticized machine: a myth of male sexuality;
2. the double meaning of statue and model: the identification with an absolute aesthetics, which has become a myth itself;
3. the affront of escalating violence; a borderline situation, where pleasure and play turn into a horrible outburst of passion;
4. the acceleration of this rage to the point where sexual power surrenders to the dangers of a glorious transgression.¹

Les larmes d'acier, or "tears of steel," was the name given to the German bombs that rained upon Europe in World War II. (Evocative of the suffering caused by the bombing, the phrase also sounds similar to *les armes d'acier*, or "arms of steel.") With this reference in mind, it soon becomes clear that the young trainers—who perform a ritual of power, absorbed in their labor in the service of beauty—have a disturbing resemblance to the battle-hardened heroes of the National Socialist sculptor Arno Breker and the *Rassemenschen* of Leni Riefenstahl's films. But despite all its intentional historical-political references, *Les Larmes d'acier* is not a political manifesto. Lafontaine challenges the stigmatized ideal of heroic strength and beauty, while alluding to our fascination with terror. The athlete-turned-machine finally collapses under the sound of air-raid sirens, as the pose of dominance surrenders to the ideology it has created. In those moments where the music's power does not overcome the ideological hubris but rather mocks it in feigned reflection, the ritual performed by the three athletes is reduced to an empty mannerism.

By evoking the suggestive vortex of collective repressions and ideological taboos in her installations, Lafontaine touches upon similar issues to those treated by Anselm Kiefer and Gerhard Merz. With its monumental architecture, and the impression of sacredness this lends to its video images, *Les Larmes d'acier* is also a commentary on the idea of the *Gesamtkunstwerk*. "This time," states Lafontaine, "the monochrome seduction of all the previous installations is fully realized and serves as a protection." Embedded in a construction supported by gigantic buttresses, the layout of the monitors repeats the triptych configuration of an altarpiece; the installation criticizes both monumentality and monism through this juxtaposition. The work's references to Gothic cathedrals and expressionistic cinema architecture represent the helpless, pathetic attempt to build an isolated and autonomous cultural prerogative from the ideological "remnants of beauty," nature and culture being abused in the construction of a "great ideal." Because of its inherent tendency to eliminate differences and its propensity for totalitarian excesses, the striving for absolute perfection is becoming ever more violent, transforming men's bodies into unshaped masses of flesh through the extreme exaltation of ideal human proportions. Lafontaine brings this inclination to full fruition in the rhetoric of the work's different mediums and the gender roles it describes. Her anti-*Gesamtkunstwerk* visualizes how barbarism began with beauty's arrogant emancipation.

1. Marie-Jo Lafontaine, "Les Larmes d'acier," in *Documenta 8*, exh. cat. (Kassel: Documenta, 1987), vol. 2, p. 140.

BIOGRAPHY

Marie-Jo Lafontaine was born in 1950 in Antwerp, Belgium. From 1975 to 1979, she studied at the Ecole Nationale Supérieure d'Architecture et des Arts Visuels "La Cambre" in Brussels.

In 1977, she was awarded the Prix de la Jeune Peinture Belge, and in 1979, the Prix de la Critique. Since 1980, she has been integrating video into her sculptures and environments. She won the Grand Prix de la Littérature Argélienne de Pierre Restany in 1981, and the Meatball Video Award the following year. She received a 1985 grant from the Institute of Arts and Humanities in Boston, and in 1986 was presented with a FIACRE stipend from the French Ministry of Culture. In 1990, she was a guest professor at the Sommerakademie in Salzburg, Austria, and since 1992, she has been a professor of sculpture and multimedia at the Staatliche Hochschule für Gestaltung, Karlsruhe.

Solo exhibitions of Lafontaine's work have been held at the Fruitmarket Gallery, Edinburgh, and Whitechapel Art Gallery, London, 1989; and Salzburger Kunstverein, 1990. Her work has appeared in many group exhibitions, including the *Biennale de Paris*, 1980, and *Documenta*, Kassel, Germany, 1987.

SELECTED EXHIBITION CATALOGUES

INDIVIDUAL EXHIBITIONS

Des Jeux pour réjouir le regard des dieux. Marseille: Musée Cantini, 1986.

A las cinco de la tarde. Hannover: Sprengel Museum, 1986.

L'Interdit Désiré. Bourg-en-Bresse: Musée de Brou, 1987.

Marie-Jo Lafontaine. Los Angeles: Museum of Contemporary Art, 1988.

Museum für Gegenwartskunst Basel: *Marie-Jo Lafontaine: Les Larmes d'acier.* Basel: Öffentliche Kunstsammlung, 1988.

Marie-Jo Lafontaine. Hamburg: Weisses Haus, 1989.

Marie-Jo Lafontaine. London: Whitechapel Art Gallery; Edinburgh: Fruitmarket Gallery, 1989.

Passio. Salzburg: Salzburger Kunstverein, 1990.

Marie-Jo Lafontaine. Munich: W. Storms, 1991.

Marie-Jo Lafontaine. Deventer, The Netherlands: Bergkirche Kunst, 1991.

History Is Against Forgiveness. Brussels: Goethe Institut, 1992.

Wer, wenn ich schrie, hörte mich denn aus der Engel Ordnungen. Kassel, 1993.

Savoir retenir et fixer ce qui est sublime. Long Beach: California State University Art Museum, 1994.

Jeder Engel ist schrecklich. Oberhausen, Germany: Gasometer, 1994.

GROUP EXHIBITIONS

Documenta 8. Kassel: Documenta, 1987.

Arbeit in Geschichte – Geschichte in Arbeit. Hamburg: Kunsthaus und Kunstverein, 1988.

Video-Skulptur: Retrospektiv und Aktuell, 1963–1989. Cologne: Kölnischer Kunstverein and DuMont Kunsthalle, 1989.

Wiener Diwan. Vienna: Museum des 20. Jahrhunderts, 1989.

Zur Sache Selbst. Wiesbaden: Kunstmuseum, 1990.

The Readymade Boomerang: Certain Relations in Twentieth Century Art: The Eighth Biennale of Sydney. Sydney: Biennale of Sydney, 1990.

MultiMediale 2. Karlsruhe: ZKM, 1991.

Kunst Videnskab. Copenhagen: Charlottenborg, 1992.

Moving Image: Electronic Art. Karlsruhe: ZKM; Munich and Stuttgart: Oktagon, 1992.

Feuer, Wasser, Erde, Luft: Die vier Elemente. Hamburg: Deichtorhallen, 1993.

Retrospectives Installations Videos. Antwerp: MUHKA, 1993.

Philips Electronic Art. Berlin: IFA, 1993.

Confrontation. Brussels: Musée d'Issel, 1994.

Himmel und Hölle. Helsinki: Museum of Contemporary Art, 1995.

Ich Phoenix. Oberhausen: Gasometer, 1996.

pages 24–25: Marie-Jo Lafontaine, *Les Larmes d'acier (Tears of Steel)*, 1987. Six-channel video and one-channel sound installation, approximately 20 minutes, black and white, 3.33 x 7.75 x 2.7 m. ZKM/Center for Art and Media Karlsruhe, On permanent loan from the Land Baden Württemberg.



BRUCE NAUMAN

VIDEO SURVEILLANCE PIECE (PUBLIC ROOM, PRIVATE ROOM), 1969–70

Defying the conventions of traditional artistic practice, Bruce Nauman has worked in almost every conceivable medium since 1965. In mixed-media and neon sculptures, photographs, films, and videos, he has engaged in an examination of the self, using language and the body to ruminate upon issues of anxiety, constraint, and aggression. Like Man Ray and Marcel Duchamp, whose works are sources of inspiration, Nauman has produced “unfinished” artworks that depend on a viewer for completion; they pose existential questions of meaning and comprehension inspired by the artist’s interest in the writings of Ludwig Wittgenstein.

Video Surveillance Piece (Public Room, Private Room) consists of two spaces. The “Private Room” is an enclosed space containing no entrance, in which a monitor sits in one corner and a video camera is suspended diagonally across from it. The “Public Room” is the same size as the Private Room, with a similar configuration; in this space, the camera sits on the floor and the monitor is suspended, and an opening allows the viewer to enter. The cameras in both spaces sweep in a horizontal arc, relaying their images to the monitor in the other room; what the camera sees in the Private Room appears on the monitor in the Public Room and vice versa.

Nauman’s installation suggests the way in which video’s increasingly ubiquitous presence in everyday life has begun to shift the balance between privacy and the observation of behavior. By turning the viewer into the subject of the camera’s gaze, the work creates a sense of discomfort and insecurity in relation to the experience of space. Like other video works of the late 1960s and early 1970s, such as those by Ant Farm, it also explores the role of the mass media as an apparatus of the state.

Video Surveillance Piece (Public Room, Private Room) brings together two kinds of information—physical and intellectual—and places them in a strained relationship. The Private Room, a real space, is turned into a kind of imaginary one; viewers must complete the picture of it in their minds from the partial information they are offered by the video feed. Moreover, the image that viewers see on the monitor in the Public Room is of a space into which they can enter only by having their image broadcast into it. These various levels of observation and withholding of information reinforce the work’s disarming atmosphere, foregrounding a dystopic rather than utopian view of technology.

Matthew Drutt

RAW MATERIAL: BRRR, 1990

A moment of surprise, followed by irritation, then aggression, and finally the desire to withdraw—this is the usual response to Bruce Nauman’s *Raw Material* installations. As in other works from this series, the elements of *Raw Material: Brrr* are organized to provoke a strong emotional reaction. On two stacked monitors, and on a large-scale projection on an adjacent wall of the same room, the same face—that of the artist—appears in three different recorded versions. In all three videos its only action is to utter “brrr,” with its lips pressed together and eyes closed. The face appears sideways, rotated ninety degrees from its usual orientation on TV screens; this introduces a slightly alienating effect, which is joined by more irritating elements after longer observation. The face trembles with the effort to produce sounds; its facial expression—with its childish pursed lips, repeatedly uttering the same annoying and numbing “brrr”—turns into a

grotesque mask of human regression. Equally obtrusive, sound and image are closely interwoven, each intensifying the other to such a degree that they project a monumental presence. An aggressive inferno grows in the mind of the observer as the compulsive actions of this person become physically and psychologically tormenting.

Without any explanatory accessories, the person who appears in the videos seems to be caught up in a form of autism, and the serial repetition of screens in the installation compounds the confrontational effect of the video recordings. In contrast to the clearly functional character of the installation’s mechanical equipment, which seems almost to be transformed into stage props, his foolish actions seem an embodiment of the unconscious. This scenic framework lets the observer become aware of his or her voyeuristic role, but it also implicates the viewer as an actor within a play reminiscent of Samuel Beckett’s *Endgame*.

The disturbing grimace of the face in *Raw Material: Brrr* is similar to the features of some of the wax heads Nauman used in earlier works, and quite possibly derives from the make-up mask of a clown, the theme of an earlier series of video installations. Although Nauman makes intentional reference to the clichéd nature of the clown’s pain-stricken face, it cannot be read entirely as parody in his work; these clown figures, like the grimacing expression in *Raw Material: Brrr*, need to be interpreted in both a literal and a metaphorical sense. Almost like successors of the clownish parts in Beckett’s plays, they reproduce and parody, in their bare, self-indulgent actions, the plainly comic aspects of their character. In one sense, they can be understood simply as a structural phenomenon, but they also impersonate an uncertainty of human experience: that of being lost in an impersonal and transindividual codification. The clowns personify fear, exposure, aggression, and suffering—the socio-anthropological categories that are the “raw material” of Nauman’s installations.

As a vital part of the raw material of human expressive behavior, language plays a significant role in Nauman’s artistic repertoire. Nauman sees language as a combination of sign systems and patterns of behavior, functioning as a variable continuum beyond the strictly verbal. His earlier neon sculptures, with their laconic litanies, assert that language itself is a plastic material. In his *Raw Material* installations, Nauman began to incorporate the sound of language as well. By emphasizing sound vibrations, he turned language into both a material and a physical experience. In *Raw Material: Brrr*, he operates with a hieroglyphic, compressed form of language—the “raw material” of linguistic communication—that contrasts with the concise messages of the earlier works, such as “Speak and Die/Lie and Die/Hear and Die.” If we take the minutely organized word games of Nauman’s neon sculptures and apply them to the title of *Raw Material: Brrr*, we can rearrange the letters of “raw,” treating it as an anagram of “war”; “brrr” can also be interpreted as the garbled pronunciation or regressive stammering of the first letters of the artist’s given name, Bruce. What the title implies through this latent double meaning becomes more legible in terms of the complete “text” of the installation. The seemingly harmless image of the infantile man and his utterances, which appear meaningless at first, turn, in their obsessive repetitiveness, into an act of potential aggression. Like the litanies of Nauman’s sober neon sculptures, the primitive expressive behavior here culminates in an emotional confrontation, as the man’s detonations of sound begin to reveal deeper connotations. By attacking the viewer’s emotions while yet appealing to archaic levels of perception, the work gives meaning to its apparently nonsensical sounds.





page 28: Bruce Nauman, *Video Surveillance Piece (Public Room, Private Room)*, 1969–70. Two video cameras on oscillating mounts, and two video monitors, installed in two rooms; installation area variable. Solomon R. Guggenheim Museum, New York, Panza Collection 92.4167.

left and following page: Bruce Nauman, *Raw Material: Brrr*, 1990. Two-channel video and two-channel sound installation, 60 minutes, color; installation area variable, approximately 7.5 x 6.25 m. ZKM/Center for Art and Media Karlsruhe.



In 1965, when Nauman started his career, Minimalism was becoming increasingly influential in the art world. Instead of formulating his adherence or opposition to this movement, Nauman chose the path of self-confrontation in the isolation of his studio. The title "Withdrawal as an Art Form," which he chose for one of a series of "notes and projects" published in *Artforum* in 1970, is an indication of his determination to use self-referential methods and of his retreat into the metaphorical vacuum of the studio. At that early stage, Nauman already understood his personal experiences to be founded on collective patterns of perception and reaction. Based on this, it can be said that individuality is a concrete manifestation of a greater totality, and that every individual action can be interpreted on a more universal level. Nauman began to use his body as a medium to communicate ideas, documenting his actions, without aesthetic or narrative references, in photography, film, and video. With these technological extensions, he undertook a systematic exploration of self-consciousness through self-observation, as in his *Video Surveillance Piece (Public Room, Private Room)* (1969–70). In marked contrast to public performance—a predominant artistic practice of the time—Nauman used his video camera in the privacy of his studio to film a series of daily routines, supplementing it regularly to create a type of encyclopedia of human behavior. In the mid-1980s, Nauman began to experiment more rigorously with the plastic possibilities of video. In 1987, he started projecting videos directly onto walls, using these large-scale projections together with multiple monitors set up in different parts of the room. In these installations, including *Raw Material: Brrr*, the content of the video images and the formal composition of the various elements reintroduced a theme from Nauman's earlier catalogue of topics: the capacity of the body and language for social communication.

Nauman owes his precise artistic language primarily to his early contact with the work of Jasper Johns. From the wax casts of body parts to the words and furniture fragments that became predominant themes in Nauman's drawings, sculptures, and installations, the intellectual rigor of Johns's assemblages proved to be a far more congenial source of inspiration than the ironic detachment of Marcel Duchamp's surrealist found objects.

Human and animal body parts, cast in wax or aluminum and heaped into piles; grimacing heads, suspended on wires from the ceiling like macabre references to Alexander Calder's mobiles, or shown spinning ceaselessly on video monitors; these elements of Nauman's earlier work are no doubt related to the head that appears in *Raw Material: Brrr*. Caught in an incurable fixation of self-expression, it seems to bear witness to the overwhelming inner conflicts that are carried out in the unconscious. Its behavior is reminiscent of a catatonic's convulsions and involuntary contractions, compulsive symptoms that are the result of a psychic instability manifested as physical reactions. This form of confinement is analogous to the human subjection to patterns of behavior and perception beyond the sphere of the individual, which Nauman describes as anthropological factors. Despite his distanced artistic stance and his dissecting observation of this existential predicament, he also places himself in a fully exposed position in this vivisection of the human condition. The viewer might begin to feel the emotional substance of Nauman's work only after experiencing dismay in reaction to its themes, but, nevertheless, it is this human aspect of Nauman's artistic approach that reveals the deep seriousness that runs through all of his work.

Ursula Frohne

BIOGRAPHY

Bruce Nauman was born in 1941 in Fort Wayne, Indiana. From 1960, he studied mathematics, physics, and art at the University of Wisconsin in Madison, receiving a Bachelor of Arts degree in 1964. He went on to study under William T. Wiley and Robert Arneson at the University of California at Davis, graduating with a Master of Arts degree in 1966.

In 1964, Nauman gave up painting and began working in sculpture and performance art; he also began experimenting with film. He received an Artist Fellowship Award from the National Endowment for the Arts in 1968. In 1970, he taught a spring course at the University of California at Irvine, and in the same year, he received a grant from the Aspen Institute for Humanistic Studies. He was awarded an Honorary Doctor of Fine Arts degree from the San Francisco Art Institute in 1989, and in 1990, he received the Max Beckmann Preis from the City of Frankfurt.

In 1972, the Los Angeles County Museum of Art and the Whitney Museum of American Art, New York, organized the first retrospective exhibition of Nauman's work. From 1986 to 1988, an exhibition of Nauman's drawings traveled through museums in Europe and the United States. Between 1990 and 1992, sculptures and installations were shown at Museum für Gegenwartskunst, Basel; Städtische Galerie, Frankfurt am Main; and Musée Cantonal des Beaux-Arts, Lausanne. The most recent Nauman retrospective traveled to the Museo Nacional Centro de Arte Reina Sofia, Madrid; Walker Art Center, Minneapolis; the Museum of Contemporary Art, Los Angeles; Hirshhorn Museum and Sculpture Garden, Washington, D.C.; and the Museum of Modern Art, New York, from 1993 to 1995. The numerous group exhibitions in which Nauman's work has appeared include *Documenta*, Kassel, Germany, 1968, 1972, 1977, 1982, and 1992; *Tokyo Biennale '70*; *Biennale de Paris*, 1971; *Venice Biennale*, 1978 and 1980; and *Amerikanische Kunst im 20. Jahrhundert*, Martin-Gropius-Bau, Berlin, and Royal Academy of Arts, London, 1993.

SELECTED EXHIBITION CATALOGUES

INDIVIDUAL EXHIBITIONS

Bruce Nauman. London: Whitechapel Art Gallery, 1986.

Bruce Nauman: Prints, 1970–89: A Catalogue Raisonné. New York: Castelli Graphics, 1989.

Bruce Nauman: Skulpturen und Installationen, 1985–1990. Basel: Museum für Gegenwartskunst; Cologne: DuMont, 1990.

Bruce Nauman. Minneapolis: Walker Art Center, 1994.

GROUP EXHIBITIONS

1987 Biennial Exhibition. New York: Whitney Museum of American Art, 1987.

Carnegie International 1988. Pittsburgh: Museum of Art, Carnegie Institute, 1988.

Zeitlos. Berlin: Hamburger Bahnhof, 1988.

Image World: Art and Media Culture. New York: Whitney Museum of American Art, 1989.

L'Art des années soixante et soixante-dix: La Collection Panza. Saint-Etienne, France: Musée d'Art Moderne, 1989.

Video-Skulptur: Retrospektiv und Aktuell, 1963–1989. Cologne: Kölnischer Kunstverein and DuMont Kunsthalle, 1989.

The Readymade Boomerang: Certain Relations in Twentieth Century Art: The Eighth Biennale of Sydney. Sydney: Biennale of Sydney, 1990.

Carnegie International 1991. Pittsburgh: Museum of Art, Carnegie Institute, 1991.

Devil on the Stairs: Looking Back on the Eighties. Philadelphia: Institute of Contemporary Art, University of Pennsylvania, 1991.

Dislocations. New York: Museum of Modern Art, 1991.

Metropolis-International Art Exhibition Berlin 1991. Berlin: Martin-Gropius-Bau, 1991.

Motion and Document—Sequence and Time: Eadweard Muybridge and Contemporary American Photography. Andover: Addison Gallery of American Art, Phillips Academy, 1991.

The Pleasure Machine: Recent American Video. Milwaukee: Milwaukee Art Museum, 1991.

Documenta 9. Kassel: Documenta, 1992.

Moving Image: Electronic Art. Karlsruhe: ZKM; Munich and Stuttgart: Oktagon, 1992.

Transform: BildObjektSkulptur im 20. Jahrhundert. Basel: Kunstmuseum Basel and Kunsthalle Basel, 1992.

Amerikanische Kunst im 20. Jahrhundert: Malerei und Plastik 1913–1993. Berlin: Martin-Gropius-Bau; Munich: Prestel, 1993.

Gravity and Grace: The Changing Condition of Sculpture 1965–1975. London: Hayward Gallery and Arts Council of Great Britain, 1993.

Self/Made Self/Conscious: Janine Antoni and Bruce Nauman. Boston: Museum of Fine Arts, 1994.

Le Biennale d'Art Contemporain de Lyon: Installation, Cinéma, Vidéo, Informatique. Lyon: Musée d'Art Contemporain, 1995.

Féminin-masculin: Le Sens de l'art. Paris: Centre Georges Pompidou, 1995.

1965–1975: Reconsidering the Object of Art. Los Angeles: Museum of Contemporary Art, 1995.

NAM JUNE PAIK

PASSAGE, 1986

It is tempting to see Nam June Paik's *Passage* as the *Gates of Hell* of the twentieth century. The comparison to Auguste Rodin's masterwork might seem surprising, but if one looks beyond the more obvious differences, the similarities that lie beneath the surface become clear.

The main portal structure of *Passage* is composed of old TV cabinets. The doors of these outdated models are left partially open, their inside surfaces covered with mysterious characters from various sources, including prehistoric rock engravings, hieroglyphics, cuneiform writing, and Sanskrit, Syri-Hittite, and ancient Greek scripts. Each of these "doorposts" consists of three stacked cabinets, crowned by a seventeen-inch Motorola set from 1953. The "architrave" is a plain metal construction with a 1949 RCA Victor chassis on either side, below which round speakers are mounted in the triangular spandrels. In the center of the architrave, in place of the escutcheon of Baroque doorways, is the square screen of a seemingly free-floating, caseless monitor, pulsating with a frantic storm of images and framed by a mandala of eight 1948 Motorola chassis with circular Braun tubes.

Everything in this ephemeral structure, pieced together from an old collection of objects as though by children, seems to mock Rodin's awe-inspiring bronze doors. In place of bronze, the *aes aeternum*, there are prefabricated consumer products, and instead of sculptural forms there are the immaterial images that flicker on the TV screens.

Nevertheless, these two works have in common movement, a "storm of images." In discourse about media art, the temporal dimension of pictures in motion is frequently cited as the primary feature that differentiates the new mediums from traditional visual art. While this is undoubtedly true, another important factor is frequently overlooked: as Thomas Mann remarked in connection with his novel about time, *The Magic Mountain*, it is not at all the case that images exist only synchronously, and texts only in a sequence of time, for images, too, are "read" piece by piece, and memory condenses stories and plots into one complete sensation. The comparison between *Passage* and *The Gates of Hell* confirms this observation in terms of still and moving images. Although they are physically static, it would be absurd to say that the dramatic reliefs of Rodin's work are without motion. Their endless stream of ecstatic bodies threatens to overflow the surrounding architecture; the planes vibrate with a movement that is eternalized, not frozen. In Paik's work, however, the movement is just opposite: flickering video images chase each other, creating a hypnotic vortex.

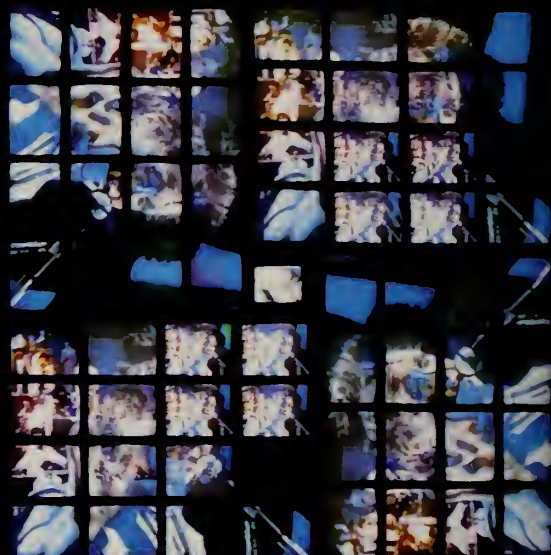
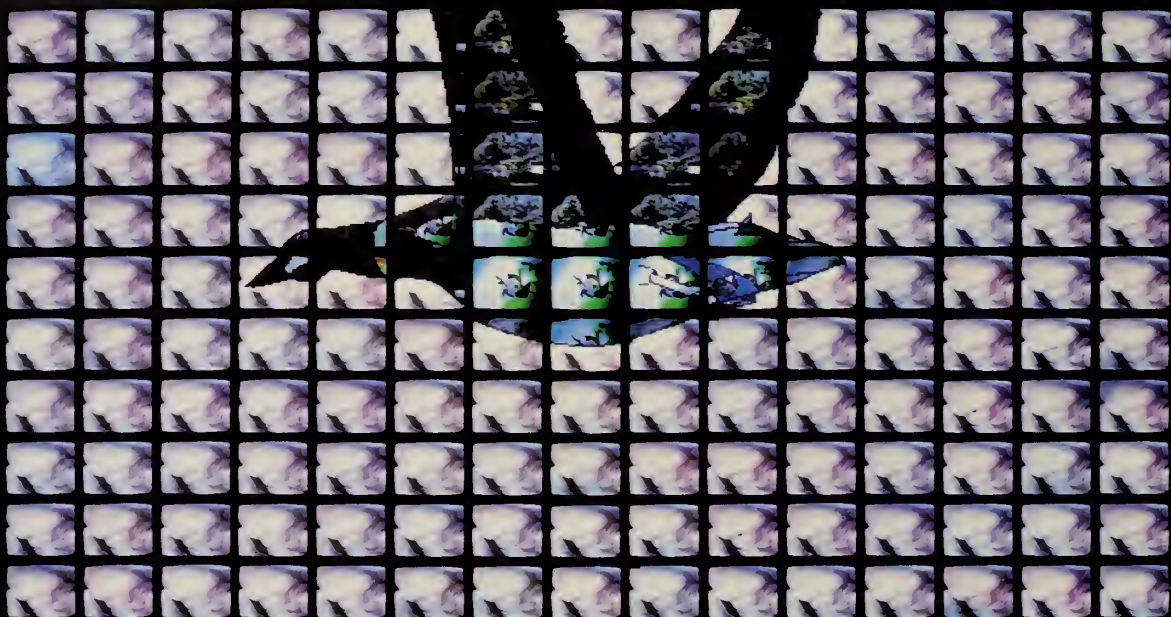
By entering the deeper structure of the images, we discover further similarities between these two works. Using a video synthesizer developed by Shuya Abe, Paik manipulated his video images at the electron-beam level, then edited the altered material into rapid image cascades. Each shot appears just long enough to attract the eye, but the cuts are too fast to give the viewer a clear understanding of the images. Two different programs run simultaneously on the nine screens, overloading the viewer's attention as it shifts constantly between them. By presenting the images in this way, Paik made it virtually impossible for the viewer to discern a narrative. Because of the cuts and the simultaneity of the programs, the strict linear progress of time breaks down and branches off—perhaps it even stops altogether.

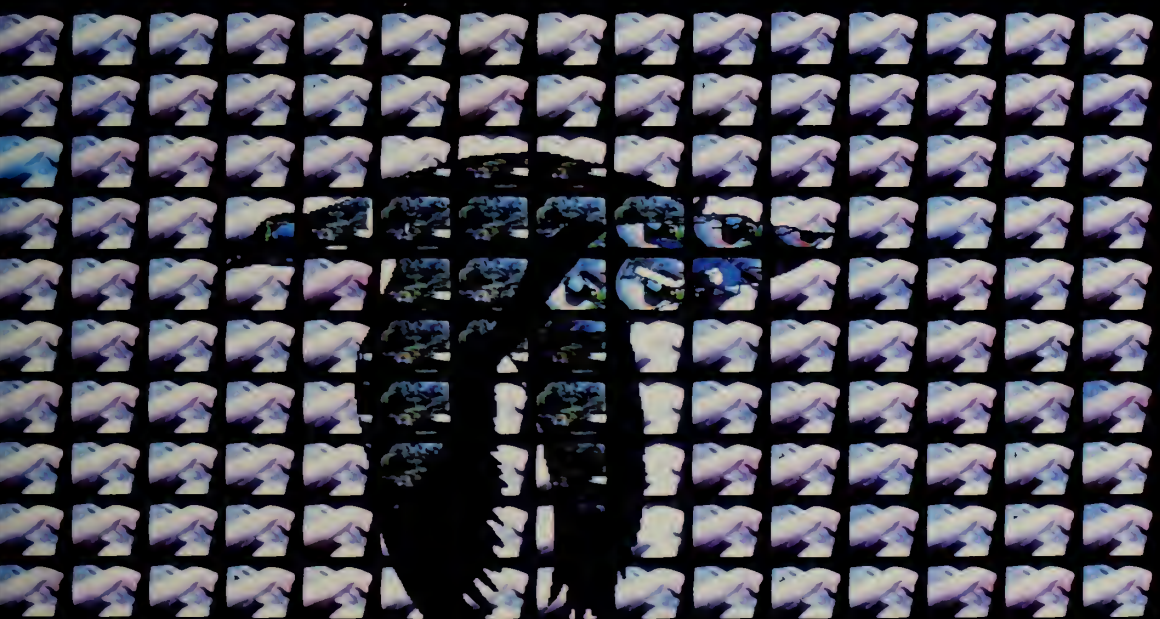
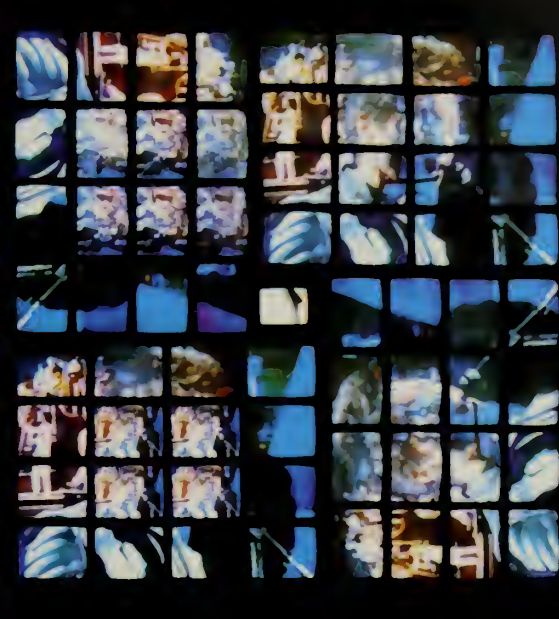
Rodin engaged in similar processes. Although his figures were modeled by hand, almost none of them was "original" in the classical sense—the work is a complex montage, an editing together of a great











number of distinct pictorial inventions that Rodin used repeatedly throughout his career. Even within individual figures, Rodin employed this technique of combining disparate parts. The impulse of the human eye to integrate the dislocated elements triggers a sense of movement. Thus, the artist achieved in the work an *eternalized motion*, which is constantly revived by the observer.

The shape of the two works leads us to a third comparison. As entranceways, both are strangely nonfunctional. Rodin's gateway cannot be opened and, like Paik's, leads from nowhere to nowhere—they are entries without buildings, relics of what was once a totality. If Rodin's gateway is the secular heir of the church portal, with scenes of Judgment Day gracing the tympanum, Paik's *Passage* may be compared to the torana of a Hindu temple, or the entrance to a Buddhist stupa. The arches of the temples of Shiva often carry a mandala or a lion's mask, which represents the sun and serves as a reference to time, death, and the cosmic fire that will consume all; it is therefore no coincidence that Paik has placed a TV-mantra in that very spot. In its shape and materials, *Passage* is also evocative of Shinto structures. Shinto shrines are usually situated in parks, which are entered through a torii—a free-standing gateway composed of wooden beams. *Passage* reflects the form of the torii, and its TV cabinets are reminiscent of the shrines themselves, in which a mirror—a direct parallel to the TV monitor—is kept as a symbol of the sun goddess Amaterasu.

With *The Gates of Hell*, Rodin subjectively recast Dante's description of Inferno, presenting a personal, un-Christian view of worldly life as eternal judgment. Rodin's subjectivity contrasts with the depersonalized attitude of Paik, but both positions meet in their aspiration toward the same goal. Referring not to Christianity but to the teachings—and forms—of Hinduism, Zen-Buddhism, and even Taoism, and combining them with the artistic ideas of the Fluxus movement ("passage" is, after all, just another word for "Fluxus"), Paik criticizes the linear logic of the West. This logic is manifest in the "one-way time" of television, which Paik subverts by applying ancient meditation techniques to the medium: as he stated in 1963, "To observe the parallel streams of various independent movements SIMULTANEOUSLY is a classical technique to grasp eternity." The video cuts, the parallel display of separate programs, and the resulting unpredictability of the visual processes in *Passage* all appear to be a literal translation of this statement, and the cryptic characters inside the TV cabinets are further signs of the departure from an imperative to follow linear codes.

1. Nam June Paik, "Nachspiel zur AUSTELLUNG des EXPERIMENTELLEN FERNSEHENS, März 1963, Galerie Parnass," in Paik, *Niederschriften eines Kulturmaden, Aphorismen, Briefe, Texte*, ed. Edith Decker (Cologne: DuMont, 1992), p. 106.

Oliver Seifert

MEGATRON, 1995

A pioneer of video art, Nam June Paik is widely considered to be a preeminent figure in the medium's evolution. Since the early 1960s, he has manipulated television—its images and its physical apparatus—in almost every imaginable way: reconfiguring its electronic signal, emptying it of its circuitry, filling it with different artifacts, and fashioning it into sculptural arrangements. He belongs to the early generation of artists whose work was both a celebration and a critique of the language of television; these artists transformed television from a quotidian device of popular culture into an alternative means of artistic expression.

Paik's approach to video is informed by myriad impulses. His performances and video works are characterized by satire and an almost reckless will to defy convention, attitudes that are typical of the works of

the Fluxus group, which counted Paik as a member. Treating the television as a kind of canvas, he has attempted to develop an electronic language analogous to painting. He deploys an improvisational approach that has its roots in his musical training and his appreciation for both classical and avant-garde compositions. In particular, the sound variations of John Cage, with whom Paik became friends in the late 1950s, have been a long-lasting influence, which is evident in Paik's affinity for generating random, cyclical patterns of imagery.

In his earliest experiments with cathode-ray tubes, Paik converted the electronic image into an abstract form, distorting the television's signal into wavelike gyrations that could occasionally be manipulated by the viewer. By 1968, Paik had developed, with his colleague Shuya Abe, a mechanism called the Video Synthesizer, a modified colorizer that turns stable images into swirling explosions of form and color. Further destabilizing the veneer of reality offered by the telecast image, Paik then developed his characteristic style of splicing together images from disparate sources in rapid and random succession, a technique that is associated today with the aesthetic of music videos.

Megatron is Paik's most ambitious statement to date. Composed of two adjoining video walls—the rectangular 150-monitor *Megatron* and the square sixty-five-monitor *Matrix*—the piece is fed by an array of laser-disc players and controlled by several computers. The two works play off one another, occasionally sharing imagery but generally functioning as independent, yet synchronized, elements. As is characteristic of many of Paik's recent works, *Megatron* reintroduces elements from earlier projects, such as his Fluxus performances and collaborations with Charlotte Moorman and Joseph Beuys. These works, which by now have an air of familiarity to them, are placed in a context rich with iconic images from both Eastern and Western popular culture. At one moment, pictures from the Seoul Olympic Games flash across the screen; in another, Merce Cunningham pirouettes in a pure, white space. Scenes of traditional Korean rituals are interrupted by David Bowie in concert. Live video dissolves into electronic distortions, which are punctuated by computer-generated animation. Images of war and of love assault the viewer, as rocket explosions are displaced by images of nude women reclining provocatively on sofas. Periodically, the entire wall becomes the flag of Norway, Iceland, Japan, or any other country, emphasizing the degree to which the work celebrates a fusion of international sources. The visual tumult of *Megatron* is rivaled only by the cacophony of its audio tracks, which bump and grind with the cadence of the video transformations.

Megatron appears to constantly reinvent itself; its cycle of images seldom repeats. To achieve this effect, Paik used sophisticated digital sequencers that generate random patterns of images. Even more spectacular, however, is *Megatron*'s technical breakthrough of fusing animation and live video. For example, a large animated bird—a recurrent motif—flies across the monitors, sometimes overlaying video tracks and at other times incorporating them within its contours. Paik has juxtaposed animation and live video in the past, and has turned live video into a barely recognizable distortion, but in *Megatron*, video and animation become one.

Megatron is compelling in scale, scope, and technical prowess. It embodies an array of contrasting qualities that create a kind of unity through disunity. Visually imposing, even confusing, it manages to create a state of hypnotic serenity, calling to mind the wry image of a Buddha seated in front of a TV, a recurring image in the artist's work and one of Paik's most acerbic commentaries on spectatorship.

Matthew Drutt

BIOGRAPHY

Nam June Paik was born in 1932 in Seoul. From 1953 to 1956, he studied music history, art history, and philosophy at the University of Tokyo, writing a dissertation on Arnold Schönberg. Subsequently, he went to Germany, continuing his studies in music history and composition under Wolfgang Fortner in Munich and at the Hochschule für Musik in Freiburg. During 1957 and 1958, he took part in the Internationalen Ferienkursen für Neue Musik in Darmstadt, where he met John Cage.

In 1958, Paik worked with Karlheinz Stockhausen at the Studio für Elektronische Musik of the broadcasting station WDR, and in 1962, he performed at the Fluxus Internationale Festspiele Neuester Musik in Wiesbaden. Paik's first works incorporating manipulated TV sets were shown at the Galerie Parnass in Wuppertal in 1963. In 1964, he moved to New York City. Two years later, he built his first video sculpture, titled *TV Cross*, and between 1970 and 1971, together with Shuya Abe, he developed the first video synthesizer. Since 1979, Paik has been a professor at the Kunstakademie Düsseldorf. During the 1980s, for a number of works, including *Good Morning Mr. Orwell*, he organized large-scale live exchanges of electronic images between Europe, Asia, and the United States. In 1987, he became a member of the Akademie der Bildenden Künste, Berlin.

Paik's work has appeared in many individual and group exhibitions in the United States, Germany, Austria, Switzerland, and Japan. Most recently, his work has been shown at the Kunstmuseum Wolfsburg, Germany, and at the *Biennale d'Art Contemporain de Lyon*, 1995–96.

SELECTED EXHIBITION CATALOGUES

INDIVIDUAL EXHIBITIONS

Nam June Paik: Video Works 1963–88. London: Hayward Gallery, 1988.

Nam June Paik: Eine Kerze. Frankfurt: Portikus, 1989.

Nam June Paik: La Fée électronique. Paris: Musée d'Art Moderne de la Ville de Paris, 1989.

Nam June Paik: Beuys Vox 1961–86. Seoul: Won Gallery and Hyundai Gallery, 1990.

Nam June Paik: A Pas de loup—De Seoul à Budapest. Seoul: Won Gallery and Hyundai Gallery, 1991.

Nam June Paik: Video Time – Video Space. Stuttgart: Cantz, 1991.

Nam June Paik: Video and Paper with Allen Ginsberg. Seoul: Gallery Meegun, 1992.

Electro-Symbio Phonics for Phoenix. Knokke, Belgium: Casino Knokke, 1992.

Feedback and Feedforth. Tokyo: Watari Museum of Contemporary Art, 1993.

NAM JUNE PAIK: Eine DATA base. Stuttgart: Cantz, 1993.

Artist as Nomad. Venice, 1993.

The Electronic Superhighway: Nam June Paik in the Nineties. New York: Holly Solomon Gallery and Hyundai Gallery; Fort Lauderdale: Fort Lauderdale Museum of Art, 1994.

GROUP EXHIBITIONS

1987 Biennial Exhibition. New York: Whitney Museum of American Art, 1987.

Digital Visions: Computers in Art. Syracuse, N.Y.: Everson Museum of Art, 1987.

L'Epoque, la mode, la morale, la passion. Paris: Centre Georges Pompidou, 1987.

Video Art: Expanded Forms. New York: Whitney Museum of American Art, 1988.

Image World: Art and Media Culture. New York: Whitney Museum of American Art, 1989.

Video-Skulptur: Retrospektiv und Aktuell, 1963–1989. Cologne: Kölnischer Kunstverein and DuMont Kunsthalle, 1989.

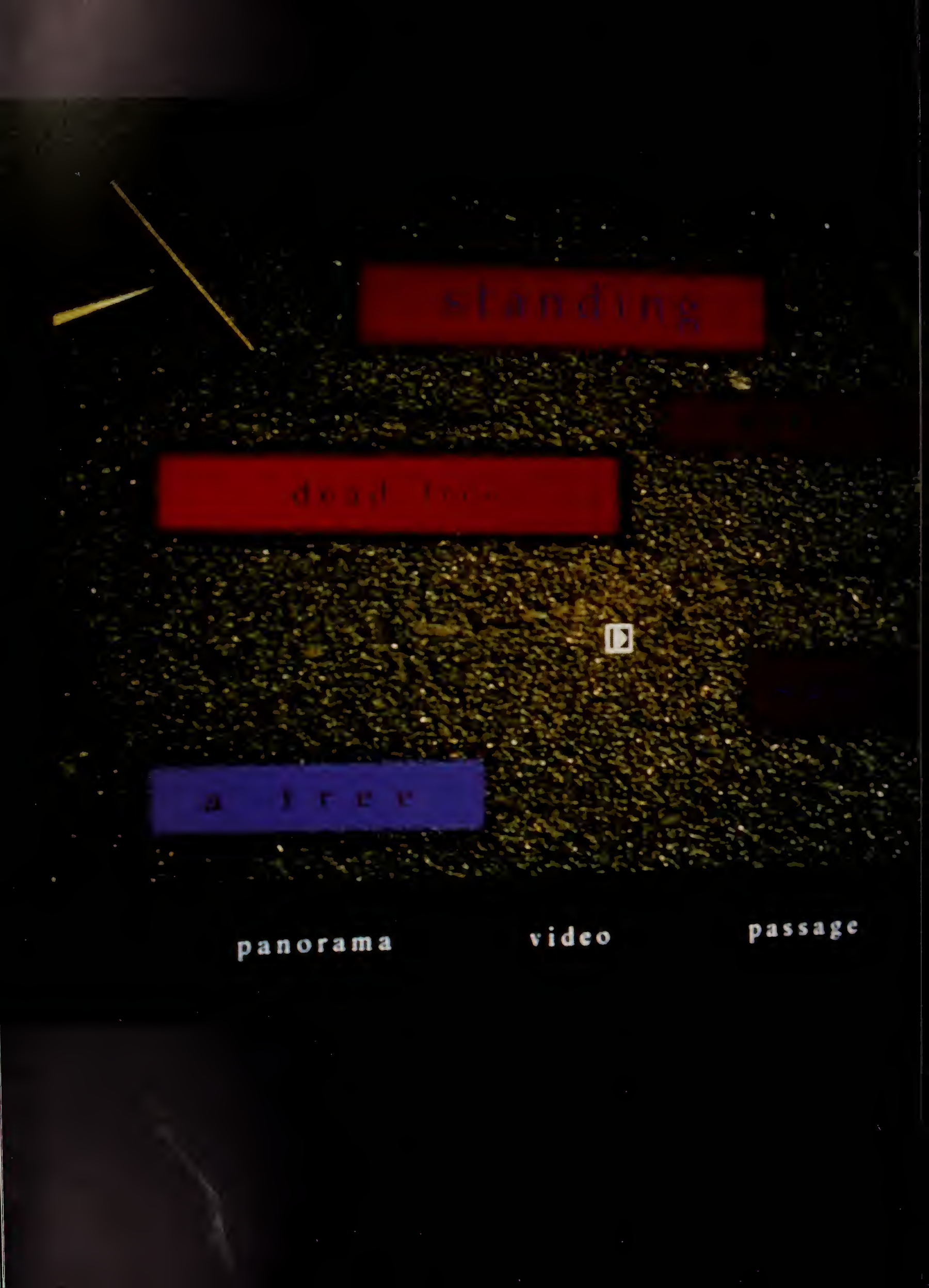
Moving Image: Electronic Art. Karlsruhe: ZKM; Munich and Stuttgart: Oktagon, 1992.

Fluxus. Basel: Kunsthalle Basel, 1994.

Le Biennale d'Art Contemporain de Lyon: Installation, Cinéma, Vidéo, Informatique. Lyon: Musée d'Art Contemporain, 1995.

pages 34–35: Nam June Paik, *Passage*, 1986. Two-channel video installation, 30 minutes, color, 3.48 x 4.31 x .61 m. ZKM/Center for Art and Media Karlsruhe.

pages 36–39: Nam June Paik, *Megatron*, 1995 (five views). Eight-channel video and two-channel sound installation, color; two parts: *Megatron*, 3.62 x 6.85 x .6 m; *Matrix*, 3.25 x 3.25 x .6 m. Courtesy of Holly Solomon Gallery, New York.



standing

dead tree



A TREE

panorama

video

passage



BILL SEAMAN

PASSAGE SETS/ONE PULLS PIVOTS AT THE TIP OF THE TONGUE, 1994-95

Bill Seaman's *Passage Sets/One Pulls Pivots at the Tip of the Tongue* is essentially a poem generator. It can be run automatically, or it can be controlled by the viewer, who may assemble poems from given phrases or use photo images to navigate through an inventory of words. Texts, still images, and video scenes appear on three adjacent projection planes; music plays and, from time to time, a sonorous voice recites the mysterious poems. The viewer is connected, via a trackball, to the central projection plane, on which a grid of 150 randomly mixed image segments is imposed. The images are details lifted from eight panorama photographs taken at various locations in Australia. At this point, the viewer has two options. The first is to zoom into one of the images and, by moving the trackball, explore the full picture. Each image is overlaid with several words, haikulike fragments from the collection of words in the computer's memory. The images are thus transformed into sites of poetry, and the poem acquires an architectural/spatial structure. The second option is to access a "poem generator" by clicking on a word on the central projection plane. Four lists appear, containing a total of 800 text fragments, each of which is connected to one of the 150 cropped images. Here again the viewer has two options: either choosing words from the lists to create a verse, or "visiting" the location of a text fragment within its original context, at which point the computer program returns to the image that contains that particular word.

By clicking on one of the 150 photos (or on the word "passage" at the bottom of the projection plane), a specific video sequence on the projection plane on the right is activated; a female and a male actor appear, performing a series of abstract gestures recorded in slow motion. The viewer can now choose to have a poem read aloud. On the projection plane to the left, only words appear. A separate, completely autonomous and noninteractive poem generator operates here, continuously rearranging the words that appear in the four lists in the central field.

Seaman's installation is a reflection on the theme of traveling. At the most immediate level, the images, which were made in Tokyo and Karlsruhe, are evocative of foreign places. But here, "to travel" stands also for the notion of identity and motion in cyberspace. The bodiless passage through the various image and text spaces of the poetic architecture is contrasted with the apparent sensuality of a gestic language. Before the eyes and under the hand of the viewer, a network of associations between images, places, poetic language, and the viewer's own memories grows, which ultimately can be read as a model of the creation of meaning through the accumulation of associations.

From a formal viewpoint, the visual output generated by Seaman's machine could be seen to stand in the tradition of the emblem; it produces interactive emblems, consisting not only of moving images but also of

variable text passages. In an emblem, an image is associated with a motto, aphorism, proverb, or short, pointed poem. The philosopher Francis Bacon wrote in 1605, "The emblem reduceth conceits intellectual to images sensible"; he stressed the value of emblems as memory aids, summarizing the art of memorizing using the principles of mnemonics, a tradition Seaman has explicitly referred to by quoting from Francis Yates's book *The Art of Memory*.¹ Yet the texts and images of *Passage Sets* are markedly different from those of an emblem in a number of ways: the work has none of the emblem's pointed character, and it opens, through variation, recombination, and associative connotation, a virtually endless field of vague and subtle recollections and feelings. With Seaman's work, we enter a space that is completely devoid of purpose.

Like Jeffrey Shaw and Toshio Iwai, Seaman does not use the computer—the most powerful artificial memory yet created—for pragmatic or scientific ends. To the contrary, he employs the machine to play games. By offering the wide range of choices made possible by the computer, his work alters the conventional relationship between art and viewer. The meanings of his images are not predetermined, but are established as the viewer experiences the work. As in all interactive art, the process of reinterpretation is not only experienced passively, as it is in traditional painting, but is turned into a material condition for the very existence of the work. The "open work of art," to use Umberto Eco's phrase, has become a physical reality—*Passage Sets* is an emblem of ever-changing memory, an emblem of the very state of emblemlessness.

1. *Level 2 Project*, exh. broch. (Sydney: Art Gallery of New South Wales, 1995).

Oliver Seifert

BIOGRAPHY

SELECTED EXHIBITION CATALOGUES

Bill Seaman was born in 1956 in Kennet, Missouri. He received a Bachelor of Fine Arts degree from the San Francisco Art Institute, and a Master of Science in visual studies from M.I.T., Cambridge, Massachusetts.

He has received a number of stipends and awards, among them a Rockefeller Foundation Visual Arts Award, 1986; a Massachusetts State Council Artist Fellowship, 1989; a Siemens-Projektstipendium from ZKM Karlsruhe, 1994; and the Prix Ars Electronica, 1992 and 1995.

Seaman's video works and interactive installations have been shown in several international exhibitions and festivals, including *The Biennale of Sydney*, 1992; *Siggraph*, Anaheim, 1993; *M.I.T. Twenty-Five-Year Retrospective*, Cambridge, Massachusetts, 1994; *MultiMediale 4*, ZKM Karlsruhe, 1995; and *International Symposium on Electronic Art*, Montreal, 1995; and at the Art Gallery of New South Wales, Sydney, 1995.

From 1992 to 1995, Seaman taught media art at the College of Fine Art of the University of New South Wales in Sydney. Since 1996, he has taught at the University of Maryland in Baltimore.

pages 42–43: Bill Seaman, *Passage Sets/One Pulls Pivots at the Tip of the Tongue*, 1994–95. Interactive audiovisual installation; three screens, each approximately 1.5 x 2 m; installation area variable, approximately 7.5 x 6.4 m. Programming by Christian Ziegler. Saxophone by Tony Wheeler. Cello by Catherine Hewgill. Produced at ZKM/Center for Art and Media Karlsruhe with funds provided by the Siemens Stipend and the InterCommunication Centre, Tokyo. Collection of the artist.

SELECTED EXHIBITIONS

The Boundary Rider: The Ninth Biennale of Sydney. Sydney: Art Gallery of New South Wales, 1992.

MultiMediale 4. Karlsruhe: ZKM, 1995.

European Media Art Festival. Osnabrück, 1995.

PAPA



JEFFREY SHAW

THE LEGIBLE CITY, 1988-91

The Legible City fuses the experience of the city with the experience of reading. The viewer sits on a stationary bicycle, using the handlebar and pedals to "ride" through the scale simulation of a city that appears on a large projection screen. The city's "buildings" are computer-generated letters, which form words and sentences lining the city's streets. The handlebar and pedals of the bicycle are connected to a Silicon Graphics workstation that calculates the viewer's position within the simulated city, allows the viewer to control the route and speed of his or her tour, and modifies the projected image in real time, according to the viewer's movements. An additional small monitor in front of the bicycle displays a map of the city, where a cursor indicates the current location of the cyclist.

Shaw has created three different versions of *The Legible City*. Each is based on a real-life cityscape, the downtown areas of Karlsruhe, Amsterdam, and New York serving as his models. With each version, Shaw used texts that relate directly to the history of that city. In the Manhattan version (created in 1988-89), which represents the area between Thirty-fourth and Sixty-sixth streets and Park and Eleventh avenues, the viewer can follow eight independent narratives: fictional monologues by Ed Koch, Frank Lloyd Wright, Donald Trump, Noah Webster, a tourist, a con man, an ambassador, and a cab driver, all written by Shaw's collaborator Dirk Groeneveld. Each text appears in a different color, so the cyclist can easily choose a certain story line and follow it through the streets.

The historical texts in the Amsterdam version (1990) were selected by Groeneveld from fifteenth- to nineteenth-century sources, and they appear, in the simulated city, at the very place where the events they describe actually occurred. The texts in the Karlsruhe version (1991), too, are largely based on historical incidents. They include references to notable former inhabitants of the city, such as Karl von Drais, the inventor of the *Lauftrad*, a precursor of the bicycle. Tourist information published by the municipal administration is also quoted.

While the immediate experience of *The Legible City*—being able to move freely through an artificial world—is compelling, the complex metaphorical possibilities that arise from the work are equally startling. There is a sensual contrast between the real bicycle and the virtual space. The cyclist can pedal hard enough to run out of breath, but will always remain physically in the same place, while at the same time he or she traverses the virtual city bodiless, perhaps even cutting through the buildings' walls.

The piece also involves the superimposition of subjective memory onto the objective reality of city architecture. Only those visitors to the simulated cities who are familiar with their factual counterparts will be able to uncover all the work's treasures; they will experience the familiar in an

unfamiliar guise, and this breach provides a measure of our perceptual limitations.

Beyond these two aspects of *The Legible City*, the phenomena of language and writing add other layers of meaning to the work. If the viewer could do nothing more than ride aimlessly through the cities, *The Legible City* would be no more than a kind of video game. And if the objective were simply to alter the appearance of a given city, why would an artist create a real-time simulation? Only the presence of writing makes it clear that a city is not only a geographical agglomeration of architecture, but also an immaterial pattern of experiences. The content of the texts, which can be perceived only when the viewer performs the activities of cycling and reading, reveals that the inhabitants' history plays an important role in shaping the identity of a place. The effort it takes the viewer to synthesize the slowly approaching, extremely foreshortened letters into phrases while cycling gives evidence of the fact that, in spite of the immateriality of the virtual city, a new reality is being formed in the viewer's mind.

When writing literally becomes architecture, as it does in this installation, it somehow transcends its own linearity. As a network of "streets," the text of *The Legible City* puts in visual form the hypertext links that thread their way through the Internet. And as a "city," the work is a materialized metaphor, a model of the process of perception.

Oliver Seifert

BIOGRAPHY

Jeffrey Shaw was born in 1944 in Melbourne, Australia. From 1963, he studied architecture and later art history at the University of Melbourne. In 1965, he continued his education in the visual arts at the Brera Art Academy in Milan and at the St. Martin's School of Art in London. At the end of the 1980s, Shaw taught at the Academie van Beeldende Kunsten Rotterdam and in 1990 at the Rietveld Akademie in Amsterdam. Since 1991, he has been director of the Institute for Image Media at ZKM Karlsruhe.

For his interactive installations, Shaw received an award at L'Immagine Elettronica festival, Ferrara, Italy, and a Prix Ars Electronica, both in 1990.

Shaw's work has been shown at the *Biennale de Paris*, 1975; Bonnefanten Museum, Maastricht, The Netherlands, 1988; *International Art and Science Exhibition*, Kanagawa Science Center Kawasaki-Shi, Kawasaki, Japan, 1989; Musée d'Issel, Brussels, 1992; Ars Electronica, Linz, 1994; and *Le Biennale d'Art Contemporain de Lyon*, 1995–96. A solo exhibition of his computer installations was shown at Neue Galerie am Landesmuseum Joanneum Graz, Austria, 1995.

SELECTED EXHIBITION CATALOGUES

GROUP EXHIBITIONS

Moving Image: Electronic Art. Karlsruhe: Zentrum für Kunst und Medientechnologie; Munich and Stuttgart: Oktagon, 1992.

The Boundary Rider: The Ninth Biennale of Sydney. Sydney: Art Gallery of New South Wales, 1992.

MultiMediale 3. Karlsruhe: ZKM, 1993.

Ars Electronica 94. Linz, 1994.

Interface 2, Weltbilder – Bildwelten, Computergestützte Visionen. Hamburg, 1995.

MultiMediale 4. Karlsruhe: ZKM, 1995.

Fotografie nach der Fotografie. Munich: Aktionsforum Praterinsel, 1995.

Le Biennale d'Art Contemporain de Lyon: Installation, Cinéma, Vidéo, Informatique. Lyon: Musée d'Art Contemporain, 1995.

The Butterfly Effect. Budapest: Soros Foundation, 1996.

pages 46–47: Jeffrey Shaw, *The Legible City*, 1988–91. Interactive computer-graphic installation; screen approximately 3.5 x 5 m; installation area variable, approximately 5.5 x 8.8 m. Text by Dirk Groeneveld. Programming by Gideon May. ZKM Center for Art and Media Karlsruhe.

STEINA and WOODY VASULKA

MATRIX I, 1970-72

Steina and Woody Vasulka began working in the pioneering days of video art in the 1960s and 1970s, when artists interested in the medium were largely concerned with the social and political implications of television. In an era when "the establishment" as a political body was generally under attack, the seamless flow of commercial and institutional information in the form of broadcast images, texts, and sound was subject to intense scrutiny and criticism. Artists took possession of the television medium to generate alternative strategies of production, offering it as a site for aesthetic investigation rather than as a space for commercial entertainment and institutional authority.

In contrast to many of their peers, the Vasulkas focused on the technological infrastructure of television, rather than on the social issues surrounding it. Four years after their arrival in the United States in 1965 (they met in Prague in the early 1960s), they began creating collaborative works that utilized their respective skills: his as an engineer and film editor, hers as a musician. In 1971, along with Andres Mannik, they founded the Kitchen, an alternative space in New York where artists could experiment with sound and electronic images. With a more scientific than intuitive approach, the Vasulkas began testing the limits of existing technologies to explore the formal properties of digital and analog imagery, the materiality of electronic signals, and the temporal relations between audio and video.

Matrix I represents their first attempt to formalize many of these early experiments. A twenty-screen video array (or configuration of multiple monitors) that knits together a selection of the Vasulkas' investigations into the phenomenology of sound and vision, *Matrix I* brings together a selection from the artists' 1970-72 *Matrix* series of video-array projects.¹ The Vasulkas were early proponents of multimonitor video configurations, an initial departure from the convention of single-channel works that would eventually lead to video installations.

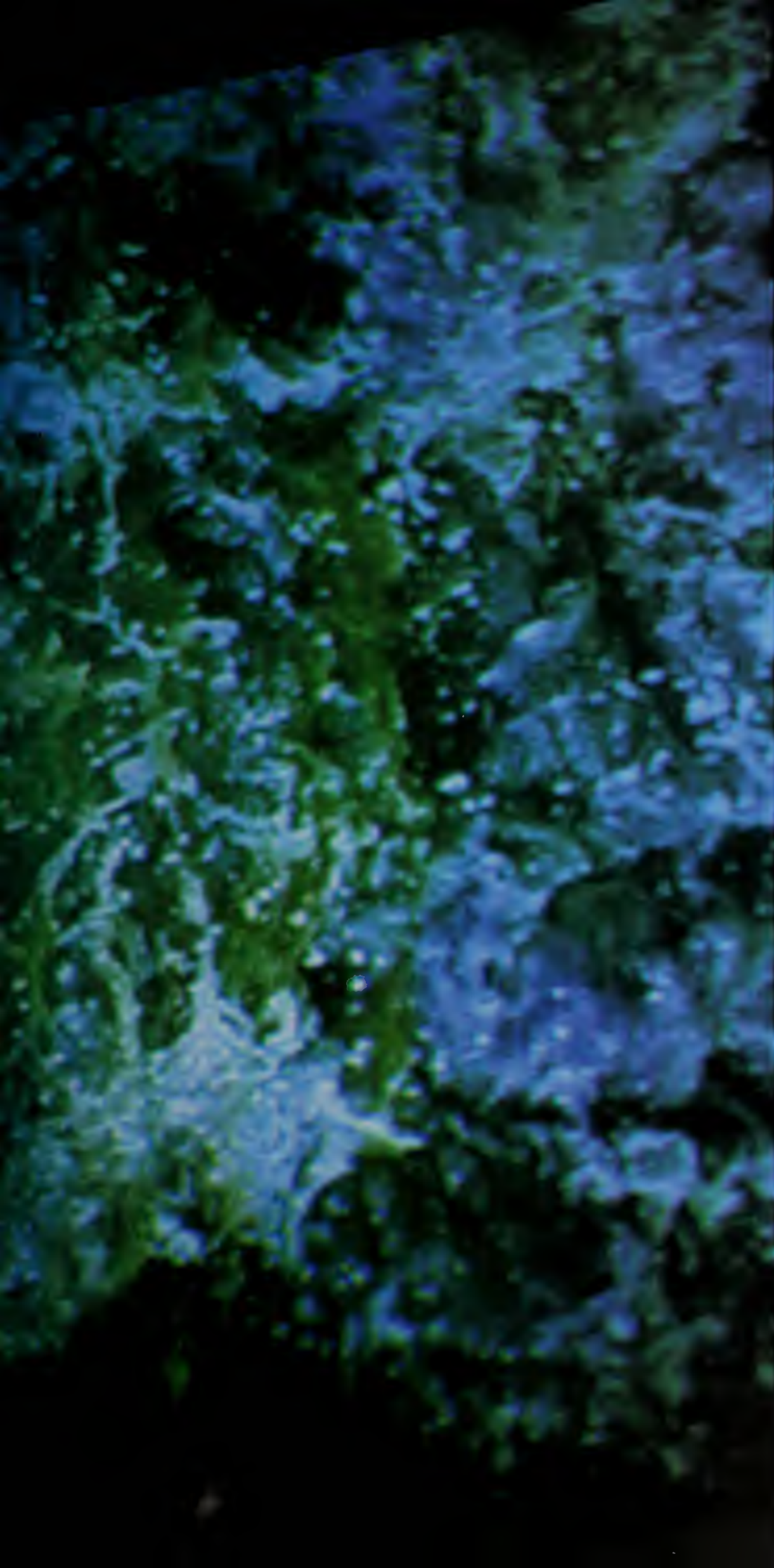
For the *Matrix* series, the Vasulkas worked with engineer George Brown, a frequent collaborator in these years, in adapting a keyer—a device that regulates the combination of two visual signals—into an apparatus capable of layering multiple images; this approach is typical of the artists' interest in modifying technology for aesthetic ends. The sound in *Matrix I* is generated, in part, by patterns of random electronic signals. These signals also generate images, which themselves generate sound. The result is a sequence of pulsing abstract forms that move horizontally across the video monitors; although the same image appears on each screen, the impression is of synchronized waves moving across the field of monitors. This horizontal movement, which might seem mundane to the sophisticated viewer of the 1990s, was another technical breakthrough; up until that point, experiments in scrolling and simulating the passage of images between different screens had been limited to vertical movement, as in Joan Jonas's *Vertical Roll* (1972).

In some respects, the abstract, geometric character of *Matrix I* is reminiscent of the experiments in film and nonobjective form conducted by artists in the 1920s. In the work of Hans Richter and László Moholy-Nagy, for example, abstract shapes are manipulated into moving compositions that simulate rhythm, musical harmony, and the contrasting values of opacity and transparency. The desire to create form from technical process is an inherently Modernist impulse. While acknowledging a general interest in such aesthetics, however, the Vasulkas credit the less austere painterly investigations of Salvador Dalí and Maurits Cornelis Escher, with their distortions of visual perception, as more immediate influences. The artists









pages 50–51: Steina and Woody Vasulka, *Matrix I*, 1970–72. One-channel video and two-channel sound installation, 30 minutes, black and white, 1.63 x 3.18 x .48 m. Collection of the artists.

left: Steina Vasulka, *Borealis*, 1993. Two-channel video and four-channel sound installation, 10 minutes, color; installation space variable, approximately 5 x 9.75 x 9.75 m. ZKM/Center for Art and Media Karlsruhe.

also cite the significance of Bela Jules, whose essays on the nature of “Cyclopean vision”—the fusion of left- and right-eye cognition to create a third-eye viewpoint—bear specifically on the effects achieved in *Matrix I*,² where multiple camera setups were employed to create an overall composite image.

1. While the *Matrix* series includes experiments in both black-and-white and color, *Matrix I* includes monochrome images only. A second work, *Matrix II*, which is not in this exhibition, is a twelve-monitor video wall that incorporates their experiments from this series in color.

2. Conversation with the author, April 1996.

Matthew Drutt

BOREALIS, 1993

Steina Vasulka uses rotating cameras in her installations as instruments to explore the phenomena of time and space, recording her surroundings without any interference to create documents of given forms and sounds. In *Borealis*, Vasulka establishes a spatial relationship between the visual and acoustic elements of nature. Fragmented landscape images, which the artist recorded in her country of origin, Iceland, in 1992, appear on four free-standing, transparent screens in a darkened room. Two mirrors set up in conjunction with two projectors disseminate the images to the screens; because of the screens' translucent material, the images are visible on both sides. The viewer is surrounded by a play of recorded sounds and moving, free-floating depictions of water, rock surfaces, and soil, becoming captivated by the images of natural phenomena and experiencing a direct confrontation with the physical power of the elements.

The electronic manipulations employed by Vasulka and her husband, Woody, in both their collaborative and individual projects, produce strange effects that seem to subvert natural laws, confusing our perceptual beliefs. In *Borealis*, the video material is manipulated in such a way that we see the flow of water in reverse, returning to its source; through cross-fading, minute shifts in the soil appear to swell to the size of avalanches; and precise superimpositions transform natural rock formations into complex, virtual sedimentations. The main theme of *Borealis* is the movement and flow of nature. Because of the open arrangement of the large screens, the visitor can feel entrapped by the power of nature in the gaps that are left between them. The enhanced visual and acoustic presence of the recordings allows the viewer to participate in a visual and sensual experience while being drawn closer to the textures of the natural elements.

Borealis incorporates landscape within an architectural configuration, fusing both elements to create a new, artificial genre made possible by the medium of video. The projections on the screens interact with the space around them, while the planes themselves, in their random placement and their orientation toward the projectors, create their own spaces—they act as an incidentally arranged subarchitecture, offering both fixed and changing scenes in which the viewer has no option but to react to the ceaseless movement of the images. Despite the material presence of the screens, the motion of the images suggests a purely illusionary tectonics of planes. The architecture of the floating screens seems to fade under the immateriality of the images. In contrast, the projected images fill the space with their extraordinary mass, the emphasized materiality of their content superceding their virtual character. Close-ups of small sections of landscape and enlargements of detailed surface textures grow in the video projections into towering formations. Concentrated fragments of nature can turn into mountain ranges and landscape panoramas. Their monumentality represents their ability to withstand the forces of time, climate, and evolution. As architecture and landscape interact, each simultaneously constructs and deconstructs the other.

Since her move to New Mexico in 1980, Vasulka has drawn on the landscape as a recurring theme in her work. It is not the romantic implication of this traditional artistic motif that interests her, but the influence of machines on geographical and geological conditions. Unimpeded by the art-historical associations of the landscape genre, Vasulka views the scenery she encounters in the Southwest quite pragmatically, as an extension of spatial dimensions and perspectives that allows her to expand her artistic configurations. The whole of the Southwest, she has said, now serves as her studio.¹ This impulse to move the studio outside, into nature, evokes a long succession of plein-air movements with widely varying artistic intentions, from Impressionism in the nineteenth century to the earthworks of the 1960s and 1970s. Vasulka's manipulations of nature are most closely related to Robert Smithson's large-scale landscape interventions, some of which were only accessible through the mediums of film and photography. Like Smithson, who called himself a “site-seer,” Vasulka uses her camera to penetrate deep into the geological and physical structures of earth, stone, and water. Works such as *Summer Salt* (1982), *The West* (1983), and *Geomania* (1989), which are based on an optically deconstructed approximation of detailed landscape textures, bring to mind Smithson's approach to natural realities. While Smithson used heavy machinery to move large amounts of earth, in Vasulka's work this feat is accomplished by her use of video. Like Smithson's earthworks, *Borealis* is composed of a number of precisely choreographed pieces of nature that reorganize geological processes; in Vasulka's work, this is accomplished by means of depth adjustments, optical echoes and reversal effects, superimpositions, and other electronic manipulations. *Borealis* seems to tell the history of the earth in a fragmented text composed of the sediments of time. The viewer's experience is that of a traveler, who, via the real-time projections, develops a sense of the duration of an observation. While Process and performance art of the late 1960s and early 1970s brought real time into the galleries and museums, *Borealis* employs geological and paleontological measures of time, which leave little space for human intervention. The pixellated structure of Vasulka's medium—the digital image—relates to the geological and archeological structures of the subject of her recordings. Like a cartographer, she documents the graphic and structural elements of natural sites, her digitalized projections forming “maps” of the landscape.

Smithson did not consider his inclination toward earthworks as biographically predetermined, and Vasulka, also, though her work is concerned with the landscape of her birthplace and immediate surroundings, resists a mythical/female or purely aesthetic interpretation. Her landscape adaptations underscore the phenomenological interest of a place where pre- and posthistorical aspects meet in one material formation. Vasulka leaves behind painting, sculpture, and architecture, using video to enter a timeless world of ideas where she transposes history and entropy, material and erosion into the transparency of a visual language.

1. Steina Vasulka, quoted in Marita Sturken, “Steina and Woody Vasulka: In Dialogue with the Machine,” in *Steina and Woody Vasulka: Machine Media*, exh. cat. (San Francisco: San Francisco Museum of Modern Art, 1996), p. 46.

Ursula Frohne

BIOGRAPHIES

Steina Vasulka was born Steinunn Briem Bjarnadóttir in 1940 in Reykjavík, Iceland. She studied violin and musical theory, and in 1959, she received a scholarship from the Czechoslovak Ministry of Culture to attend the music conservatory in Prague. In 1964, she joined the Icelandic Symphony Orchestra.

Woody Vasulka was born Bohuslav Peter Vasulka in 1937 in Brno, Czechoslovakia. He studied metal technology and hydraulic mechanics at the School of Industrial Engineering in Brno, where he received a baccalaureate degree in 1956. Later, he attended the Academy of the Performing Arts in Prague, where he directed and produced several short films.

The Vasulkas met in Prague in the early 1960s. They were married in 1964, and moved to New York in 1965. There, Steina worked as a free-lance musician and Woody as a multiscreen film editor. In 1971, together with Andreas Mannik, they founded the Kitchen, a performance space for the media arts in New York. During these years, they collaborated extensively on investigations into the electronic nature of video and sound, to produce documentaries about theater, dance, and music. In 1974, the Vasulkas moved to Buffalo, New York, where they joined the faculty of the Center for Media Study at the State University of New York. At this

point, their interests diverged. Woody turned his attention to the Rutt/Etra Scan Processor, and in 1976, worked with Don MacArthur and then Jeffrey Schier to build the Digital Image Articulator. Steina began experimenting with the camera as an autonomous imaging instrument in work that would later become the *Machine Vision* series. Since 1980, the Vasulkas have lived in Santa Fe, New Mexico.

The Vasulkas have been artists-in-residence at the National Center for Experiments in Television at KQED in San Francisco, and at WNET/Thirteen in New York. Individually and collectively, they have received funding from the New York Council on the Arts, Creative Artists Public Service, the National Endowment for the Arts, the Corporation for Public Broadcasting, the John Simon Guggenheim Memorial Foundation, and the New Mexico Arts Division. Both received the American Film Institute Maya Deren Award in 1992 and the Siemens-Medienkunstpreis from ZKM Karlsruhe in 1995. In 1988, Steina was an artist-in-residence in Tokyo on a U.S./Japan Friendship Commission grant. In 1993, Woody received a Soros Foundation fellowship to lecture and present work throughout Eastern Europe.

Among the exhibitions that have been devoted to the Vasulkas' work are *The West*, Centre Georges

Pompidou, Paris, 1984; *Focus: The Vasulkas*, Institute of Contemporary Art, Boston, 1986; *Steina & Woody Vasulka*, Hitachi Showroom, Tokyo, 1988; and *Woody and Steina Vasulka: Machine Media*, San Francisco Museum of Modern Art, 1996. Group exhibitions in which their work has appeared include *Projected Video*, Whitney Museum of American Art, New York, 1975; *Festival International d'Art Vidéo*, Locarno, Switzerland, 1984; and *Biennial Exhibition*, Whitney Museum of American Art, 1989. In 1992, the Vasulkas organized *Eigenwelt der Apparate-Welt: Pioneers of Electronic Art*, an exhibition of early electronic tools at Ars Electronica in Linz, Austria.

Steina has taught at the Akademie für Angewandte Kunst in Vienna, the Institut für Neue Medien at the Städelschule, Frankfurt, and the College of Arts and Crafts, Reykjavík. Since 1993, Woody has been a visiting professor at the Faculty of Art Polytechnic Institute, in Brno, Czech Republic.

Reprinted from Steina and Woody Vasulka: Machine Media, exh. cat. (San Francisco: San Francisco Museum of Modern Art, 1996).

SELECTED EXHIBITION CATALOGUES

TWO-PERSON EXHIBITIONS

Steina and Woody Vasulka: The West. New York: Fine Arts Center Gallery, State University of New York at Stony Brook, 1987.

Steina and Woody Vasulka: Machine Media. San Francisco: Museum of Modern Art, 1996.

GROUP EXHIBITIONS

American Landscape Video: The Electronic Grove. Pittsburgh: Museum of Art, Carnegie Institute, 1988.

Traversals: Instructions to the Double. Long Beach: Long Beach Museum of Art, 1990.

Eigenwelt der Apparate-Welt: Pioneers of Electronic Art. Linz: Ars Electronica, 1992.

Critical Mass. Santa Fe: Museum of Fine Arts, 1993.





BILL VIOLA

THE CITY OF MAN, 1989

The coexistence and fusion of different modes of being is one of the main themes in Bill Viola's theatrical installations. His works often express, through the simultaneity and permutation of collected images, in which fragments of landscapes, cities, nature, destruction, birth, and death come together in rhythmic sequences to form contemporary tableaux, the passage through different stages of life, illustrating through varying references the artist's experience and world view: that everything revolves around "change and process."¹ This insight seems disarmingly simple at first, but proves to be quite complex if we contemplate the antitheses between the elements of Viola's installations.

The City of Man consists of three large projection planes, set up side by side in a triptych arrangement. The austerity of the altarlike composition, with two narrow side panels flanking a larger central panel, is further emphasized by the brown walnut frame that encloses these three elements. The frame defines the space of the images that appear on the panels, but it also elevates these images, which outwardly remain grounded in the sphere of the ordinary. Real-time recordings are shown in parallel on the screens, where the mediums of painting, cinema, and video merge. Repeating the threefold arrangement of the screens, the content of the images is grouped into three symbolic units—paradise, earthly life, and hell, themes in the tradition of medieval painting, as exemplified in the works of Hieronymus Bosch. Using moving signs, with a typology that does not hide its indebtedness to Bosch's allegorical parables, Viola draws scenes of a modern world that unfold atmospherically in sequences that oscillate between dream and reality, idyll and inferno.

The City of Man's left field represents the archetype of paradise, displaying bucolic land- and cityscape impressions. In their pathetic beauty, they seem to be modern replicas of the dream of the New World, where arcadia and wilderness were to be transformed into an earthly paradise by the civilizing capacity of man, so both could exist side by side as sublime entities. The topic of the middle field is the material world, as the site of human competition for resources, power, and territory. Prosaic scenes of people at work alternate with views of profane meeting rooms and sacred church interiors, symbolizing humankind's "developed" state, in which man has established a pragmatic, cultural relationship with the natural, sensual world and the profitable possibilities he has created. The different spheres of public life shown here represent the value systems that regulate the ownership and utilization of resources; interpreted in a more general sense, the centerpiece depicts the spectrum of different relations to life and the world that are shaped by society, politics/ideology, and religion. In the work's right field, we witness an allegorical vision of hell. Buildings drown in a sea of flames and smoke while lone figures try to extinguish the blaze, in what is clearly a hopeless endeavor. Destruction, damnation, and desperation dominate this part of the composition.

In *The City of Man*, as in his later works *Nantes Triptych* (1992) and *The Greeting* (1995), Viola intentionally refers to the European tradition of altar painting, attempting to establish a direct dialogue with it. Part of Viola's identity as an artist is his awareness that he is part of a tradition, and that even video images can receive vital impulses from the latent power of age-old codifications. Because of *The City of Man's* connection to a classical form of painting, its video images share the multiple levels of communication inherent in traditional iconography. Even more importantly, the religious origin of the triptych form increases the spiritual value of the work's immaterial images, and the daily products of television take on the

sacred and awe-inspiring qualities of a religious apocalypse. The "faithfulness" of a religious world view appears in the form of a profane medium, bringing to mind the commonplace that watching the daily newscast is the modern-day version of prayer time and that the television set has supplanted the domestic altar.

Viola has commented on his art-historical reference to the triptych form: "I am interested in its use as referent to the European Christian tradition, as an image that arises out of the culture and therefore resides within, not without, many of the people who have come to see it in Europe. I am less interested in its use as a quotation, or an 'appropriated image.' . . . Beyond more technical reasons such as the delicate balance of the number three and its use for comparative contrast and interaction, both visually and especially temporally, ultimately my interest in the triptych form is that it is a reflection of a cosmological and social world view, 'Heaven-Earth-Hell,' and its tripartite structure is an image of the structure of the European mind and consciousness. These aspects can become activated energies when applied to images of a contemporary nature."² These remarks suggest that Viola sees his video art as a way of revitalizing historical painting as an art discipline. He does not idealize the past in comparison to the world as it has become; rather, he is concerned with the way perceptions change under different circumstances, and with correlating this relationship, through series of images, to life. With this claim to the importance of his medium, Viola defends with fantastic intensity a more allegorical than virtual or real image space.

The visual memory that Viola always returns to—the history of art—is only the source for a new genealogy of images. In their fluctuating juxtapositions, his images tell another kind of "history," one that owes its existence to the very fact that there is no narrative in his work. Viola alludes and conjures, allowing the origins, actions, life, and suffering of the images and figures that appear in his work to remain a mystery. An allegorist, he incorporates everything, and everything means something to him: words and dreams, people and legends, facts and visions. He does not want to create a distilled product called art, with a life that has been left behind like an empty shell, but an encounter with the world in the most complete and precise sense: as an endless process and not as an event, as a physical sensation beyond the immediate and not as a single moment of clarified perception. His art does not gain a privileged position—it is not a playground for aesthetics, but the means of a confrontational re-integration. For Viola, art is a medium of reflection and a tool to penetrate the hidden layers of the unconscious, the "sediments" of human experience, which will ultimately enable us to unearth the most elementary structures of being.

Narrative is entirely absent from *The City of Man*, and is replaced by the rhythm of the work's images and the mood emanating from its scenic compilations. The image sequences create a suggestion that is entirely different in content from that of the dramatic structure of classical narration. The moment the consonance of images seems to describe a situation, the motion of the triptych's image machine disrupts a coherent reading. The background noise is the only unifying element in the flow of disparate scenes, the buzz of a freeway on the left blending with the sound of the crackling fire on the right; applause is heard periodically from the middle segment of the triptych, and, aided by the twitter of birds from the left, its staccato disrupts the murmur synchronized with the images of a church. As it is impossible to determine exactly which segment is the source of a specific sound, the eye moves restlessly across the screens.



pages 56–57: Bill Viola, *The City of Man*, 1989. Three-channel video and four-channel sound installation, color; central screen, 2.14 x 2.14 m; two lateral screens, each approximately 2.14 x 1.07 m; installation space variable, approximately 4.3 x 7.6 x 7.6 m. Number one of an edition of two. Rivendell Collection of Late Twentieth-Century Art, On permanent loan to the Center for Curatorial Studies, Bard College, Annandale-on-Hudson, New York. (Number two: ZKM/Center for Art and Media Karlsruhe.)

above and following two pages: Bill Viola, *Threshold*, 1992. Three-channel video and two-channel sound installation, black and white; and electronic sign with newsfeed; installation space variable, approximately 4.75 x 4.72 x 8.12 m. ZKM/Center for Art and Media Karlsruhe.





Viola's images absorb the viewer in the "logic" of their associative combinations. His aim is the complete dissolution of expectations and the acceptance of the permanent disappearance of all particularity. His works demand the viewer's immersion into their process of flux, invoking continuous change with hypnotic intensity. Through its time-based structure, *The City of Man* reveals Viola's hostility toward time: everything happens simultaneously and perpetually, repeating itself in cycles, as in its video loops. But in the end the video image, too, is mortal: when the equipment is turned off, the images vanish and nothing is left but memory. In *The City of Man*, the "temporality" of existence is dissolved at last—formally it becomes a "contemporality," and in the work's content a "supratemporality."

1. Bill Viola, "Das Ganze wieder zusammenfügen, Bill Viola im Gespräch mit Otto Neumaier und Alexander Pühringer," in Alexander Pühringer, ed., *Bill Viola*, exh. cat. (Salzburg: Ritter Klagenfurt and Salzburger Kunstverein, 1994), p. 143.

2. Viola, *Reasons for Knocking at an Empty House, Writings 1973–1994*, ed. Robert Violette and Viola (Cambridge, Mass.: M.I.T. Press; London: Thames and Hudson, in association with Anthony d'Offay Gallery, 1995), pp. 244–45.

Ursula Frohne

THRESHOLD, 1992

As in many of Bill Viola's works, the theme of *Threshold* is the connection between body and spirit, thought and action, contemplation and concentration, inner and outer reality. Space is organized to allow the concrete experience of crossing a threshold, where the moment of transition from one symbolic reality into another becomes the main event and the subject of perception.

As the viewer stands outside the main room of the installation, his or her attention is absorbed by the bright light of an electronic signboard. The sign broadcasts the latest news, displaying messages transmitted directly from a press agency. Because of the almost painful brightness of the moving letters, one does not notice right away that there is a gap in the middle of the sign, where the display breaks off around an opening in the wall. This is the threshold the viewer is supposed to cross, passing through the silent, but visually obtrusive, flow of electronic data to enter a darkened space.

After entering the barely lit room, the viewer's eyes slowly adapt, and the faint images of three people sleeping begin to appear on the walls. With their closed eyes and calm features, the larger-than-life-size portraits look at first like black-and-white photographs of corpses. But there is the sound of breathing, and after longer observation, minimal movements in the sleepers' faces can be discerned: gradually the viewer becomes aware that these are living people, and slowly becomes immersed in the peacefulness of the scene. The situation is so intimate that it seems to establish a personal relationship between the viewer and the sleeping people, but the immediacy of this relationship also heightens the anonymity of the figures, and, in a certain way, that of sleep itself. The sleepers are exposed to the gaze of the observer, and that leads to more than psychological identification, as the sound of regular breathing defines the space as a realm of the unconscious beyond the tireless affairs of the outside world. By observing the submersion of the sleepers, the viewer slowly sinks into a meditative state of self-reflection. The perception of the projected images begins to correspond to the vaguely felt images inside, and the threshold between outer and inner perception is crossed. Outside, objective data and facts reign; inside, spiritual reflection takes place—outside, information; inside, contemplation. The coexistence of these two levels is the fundamental reality of Viola's spatial compositions. By including in his work what exists "after or behind the physical world," he opens up a metaphysical horizon.

The drama of this contrast between levels of perception is heightened through a carefully orchestrated turn of events. Although the threshold is, in itself, neutral, marking only the point of transition from one state into another, it is a very intense motif. Because we do not know what awaits us beyond it as we approach the installation, we are uncertain and at the same time curious. Breaking through the noisy information barrier, we enter an unexpectedly quiet room. By crossing the threshold, we experience two extreme conditions: on the outside, the blinding light and the relentless bombardment of the news media, which absorb even the cruelest and most banal incidents in their persistent "alertness"; on the inside, the introverted and introspective sleepers, who are untouched by outside events. On reflection, we come to see that it is not the sleepers who are unconscious, but on the contrary, the media, who, in their restless dissemination and accumulation of news, act literally without consciousness. The moving letters of the electronic signboard do indeed hold a host of factual information, but its full significance cannot be processed in such a short span of time. If we spend a few minutes reading the procession of illuminated letters, we learn of crises and catastrophes, of politics and surveys, but we cannot find a personal perspective in this mantra of messages, or even a method to weigh the importance of the different reports. They dissolve in a quantitative continuum and evaporate into indistinct noise. This, together with the sign's disturbing glare, creates an overwhelming impression, and it is at this point that we find the symbolic threshold that Viola evokes in the installation's title. In *Threshold*, he provokes us to enter the door that leads from the "dimension of real time," the "primary time of experience," into the sphere of the "other time," where the individual experience of time takes place.¹ Crossing this threshold, we perceive ourselves not only as the subjects of our experiences, but also as objects of the events occurring around us, as exposed to the impact of these events as the sleepers are to the gaze of the audience. *Threshold* creates the impression of the simultaneous occurrence of different levels of time and consciousness. At the same time, however, in both sections of the installation, it makes reference to the instability of this "threshold" condition: the transitory nature of the events that unravel on the outside as constantly changing news reports corresponds to the labile state of dreaming on the inside; and the continuous flow of words has its counterpart in the stream of consciousness in the brain, which always remains active, even during sleep.

Just like the motif of the threshold, sleep must be read as a multiple metaphor in this work. (Viola treated this theme earlier, referring to Francisco de Goya's *Sleep of Reason* in the title of a 1988 installation.) Sleep can serve to restore an identity that has been deformed by the impact of events, for dreaming has a regenerative power, as a source of compensation for oppressing circumstances and psychic pressure. People in extreme misery, for example, can have pleasant dreams nonetheless, as if the always active unconscious wanted to alleviate the horrors of reality. Metaphorically, then, we can say that the dream "works" whereas the flow of information sleeps. The artistic fusion of both dimensions in one spatial arrangement in Viola's work shows us a world that is fragmented into inner opposites, one that finds its only unity in the irreconcilable contradictions of security and fear, protection and exposure, continuum and discontinuum, harmony and dissonance. Viola's installations illustrate an understanding of experience as an integrated system of opposing forces, which sustain, precisely because of their antagonistic character, the utopian desire for a harmonious whole.

1. Leonhard Emmerling, "Bill Viola's Installation 'The Stopping Mind,'" in *Bill Viola, Videos 1976–1991*, exh. cat. (Mannheim: Cinema Quadrat a.V., 1992), p. 14.

Ursula Frohne

BIOGRAPHY

Bill Viola was born in 1951 in New York City. From 1969, he studied at the College of Visual and Performing Arts of Syracuse University, Syracuse, New York, graduating with a Bachelor of Fine Arts degree in 1973.

During the 1970s, Viola assisted Nam June Paik and Peter Campus with various projects, and between 1973 and 1980 worked with the composer David Tudor and the avant-garde music group Composers Inside Electronics. From 1974 to 1976, he was the technical production manager of the Art/Tapes/22 Video Studio in Florence and, from 1976 to 1983, was a visiting artist at the WNET/Thirteen Television Laboratory in New York. During this time, Viola traveled frequently to the South Pacific, Indonesia, Australia, Tunisia, and India.

In 1978, and again in 1983 and 1989, the National Endowment for the Arts awarded Viola a Visual Artist Fellowship for his work in video. From 1980 to 1981, he lived in Japan on a fellowship from the U.S./Japan Friendship Commission, and was an artist-in-residence at the Sony Corporation's Atsugi Laboratories, Atsugi, Japan. He received a Video Artist Fellowship from the Rockefeller Foundation in 1982. In 1983, he taught video at the California Institute for the Arts in Valencia. He received the Polaroid Video Award for outstanding achievement in 1984, and spent part of that year as artist-in-residence at the San Diego Zoo. Also in 1984, he traveled to Fiji to document the fire-walking ceremony of the South Indian community in Suva. The John Simon Guggenheim Memorial Foundation presented Viola with a video stipend in 1985. In 1987, he won the American Film Institute Maya Deren Award, and two years later, a John D. and Catherine T.

MacArthur Foundation Award. That year, he traveled throughout the American Southwest to study ancient Native American archeological sites and rock art. In 1993, he was the first recipient of the Medienkunstpreis, awarded by ZKM Karlsruhe and the Siemens Kulturprogramm. In 1995, he was awarded an Honorary Doctor of Fine Arts degree from Syracuse University.

Among Viola's numerous individual exhibitions since 1973 are *Projects*, the Museum of Modern Art, New York, 1979; *Bill Viola: Survey of a Decade*, Contemporary Arts Museum, Houston, Texas, 1988; *Bill Viola*, Fukui Fine Arts Museum, Fukui, Japan, 1989; *Slowly Turning Narrative*, Institute of Contemporary Art, Philadelphia, Virginia Museum of Fine Arts, Richmond, Musée d'Art Contemporain, Montreal, Indianapolis Museum of Art, Indianapolis, Museum of Contemporary Art, San Diego, Center for the Fine Arts, Miami, and the Parrish Art Museum, Southampton, New York; and *Bill Viola: Unseen Images*, Kunsthalle Düsseldorf, Moderna Museet, Stockholm, Museo Nacional Centro de Arte Reina Sofía, Madrid, Musée Cantonal des Beaux-Arts, Lausanne, Whitechapel Art Gallery, London, and Tel Aviv Museum of Art, 1992. Viola represented the United States at the Venice *Biennale* in 1995. The group shows in which his work has appeared include the *Biennale de Paris*, 1975 and 1977; *Biennial Exhibition*, Whitney Museum of American Art, 1975, 1977, 1979, 1981, 1983, 1985, 1987, and 1993; Venice *Biennale*, 1986; *Passages de l'image*, Centre Georges Pompidou, Paris, 1990; and *Video Spaces*, the Museum of Modern Art, New York, 1995.

SELECTED EXHIBITION CATALOGUES

INDIVIDUAL EXHIBITIONS

Bill Viola: Installations and Videotapes. New York: Museum of Modern Art, 1987.

Bill Viola: Survey of a Decade. Houston: Contemporary Arts Museum, 1988.

Bill Viola. Fukui, Japan: Fukui Fine Arts Museum, 1990.

Slowly Turning Narrative. Philadelphia: Institute of Contemporary Art, University of Pennsylvania; Richmond: Virginia Museum of Fine Arts, 1992.

Bill Viola: Unseen Images. Düsseldorf: Kunsthalle Düsseldorf, 1992.

Bill Viola. Montreal: Musée d'Art Contemporain de Montréal, 1993.

Valentini, Valentina, ed. *Bill Viola: Vedere con la mente e con il cuore*. Rome: Gangemi, 1993.

Bill Viola. Salzburg: Ritter Klagenfurt and Salzburger Kunstverein, 1994.

Bill Viola: Images and Spaces. Madison, Wis.: Madison Art Center, 1994.

Bill Viola: Buried Secrets. Tempe, Ariz.: Arizona State University Art Museum, Nelson Fine Arts Center; Hannover, Germany: Kestner-Gesellschaft, 1995.

GROUP EXHIBITIONS

The Arts for Television. Amsterdam: Stedelijk Museum; Los Angeles: Museum of Contemporary Art, 1987.

Avant-Garde in the Eighties. Los Angeles: Los Angeles County Museum of Art, 1987.

1987 Biennial Exhibition. New York: Whitney Museum of American Art, 1987.

American Landscape Video: The Electronic Grove. Pittsburgh: The Museum of Art, Carnegie Institute, 1988.

Einleuchten: Will, Vorstell und Simul in HH. Hamburg: Deichtorhallen, 1989.

Image World: Art and Media Culture. New York: Whitney Museum of American Art, 1989.

Video-Skulptur: Retrospektiv und Aktuell, 1963–1989. Cologne: Kölnischer Kunstverein and DuMont Kunsthalle, 1989.

Bienal de la imagen en movimiento '90. Madrid: Museo Nacional Centro de Arte Reina Sofía, 1990.

Eye for I: Video Self-Portrait. New York: Independent Curators Incorporated, 1990.

Metropolis. Berlin: Martin-Gropius-Bau, 1991.

Art and the Armory: Occupied Territory. Chicago: Museum of Contemporary Art, 1992.

Documenta 9. Kassel: Documenta, 1992.

Feuer, Wasser, Erde, Luft: Die vier Elemente. Hamburg: Deichtorhallen, 1993.

Frischluff: Installation-Interaktion: Videokunst der 80er Jahre. Duisburg, Germany: Wilhelm Lehmbruck Museum Duisburg, 1993.

Rites of Passage. London: Tate Gallery, 1995.

Video Spaces. New York: Museum of Modern Art, 1995.

Video d'autore 1986–1995. Rome: Gangemi, 1995.

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